ATOMIC ENERGY OF CANADA LIMITED

FEW GROUP CROSS SECTIONS FOR 274 NUCLIDES
BASED ON ENDF/B V

by

M.S. Milgram, S. Thompson and R. Paulson*

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ABSTRACT

Thermal and epithermal Westcott parameters g, g_e, and s have been calculated for 274 nuclides at four physical temperatures using ENDF/B-V as the data source. Calculated cross sections and parameters are listed in the text or in microfiche appendices.

Notice

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1. INTRODUCTION

In the analysis of thermal reactors, it is convenient to represent the energy dependent reaction cross section for a particular nuclide by few group parameters. In the thermal ($E \lesssim 1$ eV) and epithermal (1 eV $\lesssim E \lesssim 1$ MeV) regimes, it is convenient to use the Westcott (1) representation. In the fast regime, ($E \gtrsim 1$ MeV) the usual approximation involves weighting the energy dependent cross section with a fission spectrum and averaging over the energy range of interest. In reactor codes such as SOLACE (2) and LATREP (3), the energy range is compacted into several groups – one thermal, and 46 epithermal groups, so reaction cross sections for each of these groups must be available.

Accordingly, we have calculated group parameters for materials of interest using the ENDF/B V library as a data base. From this multigroup library we have further calculated both Westcott and fixed cut-off thermal representations as well as fast cross sections. Future versions of SOLACE will be available with a (thermal group) data library based on this compilation; it is the purpose of this report to summarize the epithermal and thermal Westcott parametrizations independent of reference to any particular lattice code.

In Section 2, we briefly review the thermal cross section representations and, in Section 3, for completeness we define a fast group representation. Section 4 contains a brief description of the methodology used, and Section 5 gives a summary of the more significant results. Since many of the calculations are of more general interest than solely for application in SOLACE, a microfiche addendum is provided which contains a more complete set of results. This is discussed in Section 5 in more detail.

2. THERMAL REPRESENTATION

The derivation of Westcott and fixed cut-off representations for thermal cross sections is described in reference 1 and 2, and is summarized here for completeness' sake.

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A. Westcott Representation

Westcott assumes that the energy dependent neutron flux $\phi(E)$ can be written as the sum

$$\phi(E) = \phi_m(E) + \phi_e(E) \tag{2.1}$$

where $\phi_m(E)$, the Maxwellian flux characterized by a neutron temperature T is of the form

$$\phi_m(E) = \phi_w \sqrt{\frac{4T}{\pi T_o}} \, (1-f) \, Ee^{-E/kT}/(kT)^2 \tag{2.2}$$

and ϕ_e, the epithermal flux is written

$$\phi_e = \frac{\phi_w f}{b} \sqrt{\frac{4T}{\pi T_o}} \, \frac{\Delta_4(E,T)}{E} \tag{2.3}$$

Here we have set the normalizing Westcott flux

$$\phi_w = Nv_o \tag{2.4}$$

where N is the total neutron density, $v_o = 2200 \text{ m} \cdot \text{s}^{-1}$, $T_o = 293.6$ K is the corresponding neutron temperature, and k is Boltzmann's constant. Additionally, f is the fraction of neutrons in the $\phi_e(E)$ distribution and b=1.1763 is defined in terms of Westcott's joining function $\Delta_4(E,T)$ by

$$\int_o^\infty \frac{\Delta_4(E,T)}{E^{3/2}} \, dE = 2/(\mu kT)^{1/2} \tag{2.4}$$

together with

$$b = 4/(\mu\pi)^{1/2} \tag{2.5}$$

It is worth noting that although Δ_4 is a function of both E and T, the integral (2.4) has the form given for all T (so μ is a constant), it approximates the shape of the physical joining spectrum in thermal lattices, and has a cut-off at energy μkT. Figure 1 illustrates $\Delta_4(E,T)$ as a function of E for various values of T. According to Westcott (1), an analytic form for Δ_4 is

$$\Delta_4 = \{1-.26/(1+(E/16.4 \text{ kT})^5) + (4.75 \text{ kT}/E)^7\}^{-1} \tag{2.6}$$

In order to calculate reaction rates from an energy dependent cross section $\sigma(E)$, we need the so-called Westcott cross section σ parametrized by

$$\hat{\sigma} = \sigma_0(g(T) + rs(T)) \qquad (2.7)$$

where σ_0 is the 2200 m·s^{-1} microscopic cross section, the Westcott epithermal index r is given by

$$r = f/b \qquad (2.8)$$

and the temperature dependent integrals $g(T)$ and $s(T)$ are calculated from

$$g(T) = \frac{2}{\sigma_0}(E_0\pi)^{-1/2} (kT)^{-3/2} \int_0^\infty \sigma(E)E \exp(-E/kT)dE \qquad (2.9)$$

and

$$s(T) = \frac{1}{\sigma_0} \sqrt{\frac{4T}{\pi T_0}} \int_0^{E_2} \frac{\sigma(E)\Delta_4(E,T)}{E} dE - bg(T) \qquad (2.10)$$

Here we use $E_0 = kT_0$ and E_2 is a cut-off representing the high end of the epithermal energy range. The reaction rate (per nucleus) below energy E_2 is then given by

$$\text{Reaction Rate} = \hat{\sigma}\phi_w \qquad 2.11)$$

Remember that in the case where σ is proportional to $1/v$ we find $s=0$ and $g=1$.

B. Fixed cut-off Representation

In constrast to the Westcott temperature dependent cut-off μkT, it is convenient to define a fixed cut off energy E_1 which is customarily fixed at 0.625 eV. The sub-cut off flux is related to the Westcott flux by

$$\sigma_{sc} = \phi_w \sqrt{\frac{4T}{\pi T_0}} (1-f+f\xi(T)) \qquad (2.12)$$

and the epi-cut-off (= above cut-off) flux is given by

$$\phi_e = \phi_w f \chi(T) \qquad (2.13)$$

where $\xi(T)$ and $\chi(T)$ are (neutron) temperature dependent functions defined by

$$\xi(T) = b \int_0^{E_1} \Delta_4(E,T)/E \, dE \qquad (2.14)$$

and

$$X(T) = 1/2 \quad \sqrt{\mu kT} \int_{E_1}^{E_2} \Delta_4(E,t)/E^{3/2} \, dE \tag{2.15}$$

The sub-cut-off cross section σ_{sc} is then given by

$$\hat{\sigma}_{sc} = \sigma_0 \sqrt{\frac{\pi T_0}{4T}} \left\{ \frac{g(T)+f(g_e(T)-g(T))}{1-f(1-\xi(T))} \right\} \tag{2.16}$$

and the epi-cut-off cross section $\hat{\sigma}_e$ is

$$\hat{\sigma}_e = \frac{\sigma_0}{fX(T)} \{f(g(T)-g_e(T)) + r \, s(T)\} \tag{2.17}$$

Here we have introduced the new cut-off parametrization

$$g_e(T) = \sqrt{\frac{\mu T}{4T_0}} \frac{1}{\sigma_0} \int_0^{E_1} \frac{\Delta_4(E,t)\sigma(E)}{E} \, dE \tag{2.18}$$

The total reaction rate (per nucleus) below energy E_2 is thus

$$\text{Reaction Rate} = \hat{\sigma}_e \phi_e + \hat{\sigma}_{sc} \phi_{sc} \tag{2.19}$$

From the above considerations it is possible to derive an alternate form for $s(T)$, given by

$$s(T) = I(T) + b(g_e(T)-g(T)) \tag{2.20}$$

where

$$I(T) = \sqrt{\frac{4T}{\pi T_0}} \frac{1}{\sigma_0} \int_{E_1}^{E_2} \frac{\sigma(E)\Delta_4(E,T)}{E} \, dE \tag{2.21}$$

Recall that the resonance integral is usually defined by

$$RI = \int_{E_L}^{E_H} \frac{\sigma(E)dE}{E} \quad . \tag{2.22}$$

A second useful result for a substance with a $1/v$ cross-sectional dependence

$$(\sigma(E) = \sigma_o \ (E_o /E)^{1/2}) \ \text{is}$$

$$g_e(T) = 1. - X(T)$$

which simplifies computation when it is valid.

3. FAST GROUP REPRESENTATION

For energies greater than about 1 MeV, a reasonable approximation is to assume that the energy dependent flux shape is that of a fission spectrum approximated by

with
$$S_f(E) = \sqrt{E} \ \exp(-E/\theta) \tag{3.1}$$

$$\theta = 1.382 \ \text{MeV} \quad \text{for } U^{233}$$

$$1.354 \quad " \quad \text{for } U^{235}$$

$$1.408 \quad " \quad \text{for } Pu^{239}$$

An approximate representation for the fast group cross section is then

$$\hat{\sigma}_f = \int_{E_2}^{E_3} S_f(E)\sigma(E)dE \Bigg/ \int_{E_2}^{E_3} S_f(E)dE \tag{3.2}$$

4. METHODOLOGY

The overriding consideration has been that of automation – i.e. consistent reduction of ENDF/B data to the desired form for all materials and reaction types with a minimum of intervention or evaluation. Accordingly, the data for each material was processed by the same sequence of codes with the same parameters and error criterion.

For each material, a sequence of consecutive computer jobs was initiated, each of which employed a different module of the NJOY code (5), to process or add to the output from the previous job step. The sequence (and corresponding NJOY module) is as follows for each material (6).

   1) Create a pointwise energy dependent representation, Doppler broadened to one of four physical temperatures (BROADR,RECONR, UNRESR);

2) calculate multigroup cross sections using appropriate (neutron temperature dependent) weighting functions for 69 energy groups at each physical temperature, and for all reaction types available for each material (GROUPR);

3) sort the results, uniting scattering matrices with the other reaction types calculated at that energy and temperature (DTFR); and

4) store the final results as part of the random access multi-group nuclear data library - NUBILE (7).

Several utility programs have been written to process the NUBILE library file. To calculate any of the few group parameters listed herein, for any reaction type, we sum the appropriate multigroup cross sections σ_i with appropriate weighting; e.g.

$$g(T) = \frac{2 E_1}{\sigma_o \pi} (E_o kT)^{-1/2} e^{-E_1/kT} \sum_{i=1}^{24} \overline{\phi_i} \sigma_i$$

$$g_e = \sqrt{\frac{T}{4T_o}} \frac{1}{\sigma_o} \sum_{i=1}^{24} \sigma_i \overline{\Delta_{4_i}}$$

$$I = \sum_{i=25}^{64} \sigma_i \overline{\Delta_{4_i}}$$

where $\quad \overline{\phi_i} = \int_{E_i}^{E_{i+1}} \phi(E,T)dE$

and $\quad \overline{\Delta_{4_i}} = \int_{E_i}^{E_{i+1}} \Delta_4(E,T)dE$

To obtain s(T) use Eq.(2.20)

In addition polynomial fits to each of the above parameters are available as a function of neutron temperature, at each of the four different physical temperatures. These form a basic part of the SOLACE data library.

5. RESULTS

The processing described in Section 4 was applied to 274 materials from
ENDF/B V, listed in Table 1 by their common name, ENDF/B material number
identifier, and ZA numbers ($_{94}Pu^{240}$ has ZA = 94240).

Reaction cross sections for each of the parameters σ_o, g, g_e and s are listed
in Appendix A, at a physical temperature of $0^{\circ}K$. We define

absorption = $(n,\gamma)+(n,f)+(n,d)+(n,p)+(n,\alpha)+$ ...   (omit scatter)

total   = absorption + scatter

To define the group boundaries discussed in Section 2 and 3 we have used

E_1 = 0.625 eV corresponding to the upper limit of group 24
E_2 = 0.821 MeV corresponding to the upper limit of group 64
E_3 = 20 MeV

In the microfiche appendix we list the same parameters as in Appendix A at
three (broadened) values of the physical temperature (300 K, 700 K, 1100 K).
For each material, the parameters are listed at any of the three higher
temperatures only if the ratio of at least one value to that of the
corresponding value at $0^{\circ}K$ differs by more than one part in 1000. Table 2
is an index to the microfiche addendum.

REFERENCES

1. C.H. Westcott, "Effective Cross Section Values for Well-Moderated
    Thermal Reactor Spectra", report AECL-1101 (1970).

2. M.S. Milgram (unpublished).

3. M.S. Milgram, "A Guide to LATREP(1975), report AECL-5036 (1975).

4. R. Kinsey (ed), "ENDF/B Summary Documentation", BNL-NCS-17511(ENDF-201),
    3rd edition (1979).

5. R.E. MacFarlane, D.W. Muir, R.M. Boicourt, "The NJOY Nuclear Data
    Processing System, Vol. 1: User's Manual", LA-9303-M (ENDF-325), (1982).

6. R. Paulson (unpublished internal reports RPA-N-139 (1983), RPA-N-137
    (1982).

7. M.S. Milgram, S. Thompson (to be published).

8. M.S. Milgram, unpublished report RPA-N-130 (1980).

APPENDIX A: NOTE

The following ENDF/B-V materials are omitted from this Appendix because they could not be processed by NJOY for reasons that remain unclear:

CA-NAT	W182
Hf 176	W184
W-NAT	W185

The following material was omitted because it is believed to be substantially in error: (8)

Lu 176

In addition, the following material is included but is suspected to contain errors:

Nd 147

TABLE 1(A): LIST OF MATERIALS ALPHABETICALLY

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
AG107	A.1	CS136	A.21	I129	A.38	PB-NAT	A.57	SB126	A.76	TE127M	A.93
AG109	A.1	CS137	A.21	I130	A.38	PD102	A.57	SE74	A.77	TE128	A.94
AG111	A.1	CU-NAT	A.21	I131	A.38	PD104	A.58	SE76	A.77	TE129M	A.94
AL27	A.2	CU63	A.22	I135	A.39	PD105	A.58	SE77	A.77	TE130	A.94
AM241	A.2	C12	A.22	K-NAT	A.39	PD106	A.58	SE78	A.78	TE132	A.95
AM242G	A.3	DY160	A.22	KR78	A.40	PD108	A.59	SE80	A.78	TH230	A.95
AM243	A.3	DY161	A.23	KR80	A.40	PD110	A.59	SE82	A.78	TH232	A.95
AS75	A.4	DY162	A.23	KR82	A.40	PM147	A.59	SI-NAT	A.79	TI-NAT	A.96
AU197	A.4	DY163	A.23	KR83	A.41	PM148G	A.60	SM144	A.79	U232	A.96
BA134	A.4	DY164	A.24	KR84	A.41	PM148M	A.60	SM147	A.79	U233	A.97
BA135	A.5	ER166	A.24	KR85	A.41	PM149	A.61	SM148	A.80	U234	A.97
BA136	A.5	ER167	A.24	KR86	A.42	PM151	A.61	SM149	A.80	U235	A.98
BA137	A.5	EU151	A.25	LA139	A.42	PR141	A.61	SM150	A.81	U236	A.99
BA138	A.6	EU152	A.25	LA140	A.42	PR142	A.62	SM151	A.81	U237	A.99
BA140	A.6	EU153	A.26	LI6	A.43	PR143	A.62	SM152	A.82	U238	A.100
BE9	A.6	EU154	A.26	LI7	A.43	PU236	A.63	SM153	A.82	V-NAT	A.101
BR79	A.7	EU155	A.27	LU175	A.44	PU237	A.63	SM154	A.83	W183	A.101
BR81	A.7	EU156	A.27	MG-NAT	A.44	PU238	A.64	SN112	A.83	XE124	A.101
B10	A.7	EU157	A.28	MN55	A.44	PU239	A.65	SN114	A.83	XE126	A.102
B11	A.8	FE-NAT	A.28	MO-NAT	A.45	PU239	A.65	SN115	A.84	XE128	A.102
CD106	A.9	F19	A.28	MO92	A.45	PU240	A.66	SN116	A.84	XE129	A.102
CD110	A.9	GD152	A.29	MO94	A.45	PU241	A.67	SN117	A.84	XE130	A.103
CD111	A.9	GD154	A.29	MO95	A.46	PU242	A.67	SN118	A.85	XE131	A.103
CD112	A.10	GD155	A.29	MO96	A.46	PU243	A.68	SN119	A.85	XE132	A.103
CD113	A.10	GD156	A.30	MO97	A.46	PU244	A.69	SN120	A.85	XE133	A.104
CD114	A.10	GD157	A.30	MO98	A.47	P31	A.69	SN122	A.86	XE134	A.104
CD115M	A.11	GD158	A.31	MO99	A.47	RB85	A.69	SN124	A.86	XE135	A.104
CD116	A.11	GD160	A.31	MO100	A.47	RB86	A.70	SN125	A.86	XE136	A.105
CE140	A.11	GE72	A.31	NA23	A.48	RB87	A.70	SN126	A.87	Y89	A.105
CE141	A.12	GE73	A.32	NB93	A.48	RE185	A.70	SR84	A.87	Y91	A.105
CE142	A.12	GE74	A.32	NB94	A.48	RE187	A.71	SR86	A.87	ZR-II	A.106
CE143	A.12	GE76	A.32	NB95	A.49	RH103	A.71	SR87	A.88	ZR-NAT	A.106
CE144	A.13	HE3	A.33	ND142	A.49	RH105	A.71	SR88	A.88	ZR90	A.106
CL-NAT	A.13	HE4	A.33	ND143	A.49	RU100	A.72	SR89	A.88	ZR91	A.107
CM241	A.14	HF-NAT	A.33	ND144	A.50	RU101	A.72	SR90	A.89	ZR92	A.107
CM242	A.14	HF174	A.34	ND145	A.50	RU102	A.72	S32	A.89	ZR93	A.107
CM243	A.15	HF177	A.34	ND146	A.51	RU103	A.73	TA181	A.90	ZR94	A.108
CM244	A.16	HF178	A.34	ND147	A.52	RU104	A.73	TA182	A.90	ZR95	A.108
CM245	A.16	HF179	A.35	ND150	A.52	RU105	A.73	TB159	A.90	ZR96	A.108
CM246	A.17	HF180	A.35	NP237	A.53	RU106	A.74	TB160	A.91		
CM247	A.18	HO165	A.35	NP238	A.53	RU96	A.74	TC99	A.91		
CM248	A.18	H1	A.36	N14	A.54	RU98	A.74	TE120	A.91		
CO59	A.19	H2	A.36	N15	A.55	RU99	A.75	TE122	A.92		
CR-NAT	A.19	IN113	A.36	O16	A.55	SB121	A.75	TE123	A.92		
CS133	A.20	IN115	A.37	O17	A.55	SB123	A.75	TE124	A.92		
CS134	A.20	IN115	A.37	PA231	A.56	SB124	A.76	TE125	A.93		
CS135	A.20	I127	A.37	PA233	A.57	SB125	A.76	TE126	A.93		

TABLE 1(B): LIST OF MATERIALS BY (Z,A) IDENTIFIER

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
10010	A.36	360830	A.41	451050	A.71	521300	A.94	611480	A.60	751850	A.70
10020	A.36	360840	A.41	461020	A.57	521320	A.95	611481	A.60	751870	A.71
20030	A.33	360850	A.41	461040	A.58	531270	A.37	611490	A.61	791970	A.4
20040	A.33	360860	A.42	461050	A.58	531290	A.38	611510	A.61	820000	A.57
30060	A.43	370850	A.69	461060	A.58	531300	A.38	621440	A.79	902300	A.95
30070	A.43	370860	A.70	461080	A.59	531310	A.38	621470	A.79	902320	A.95
40090	A.6	370870	A.70	461100	A.59	531350	A.39	621480	A.80	912310	A.56
50100	A.7	380840	A.87	471070	A.1	541240	A.101	621490	A.80	912330	A.57
50110	A.8	380860	A.87	471090	A.1	541260	A.102	621500	A.81	922320	A.96
60000	A.22	380870	A.88	471110	A.1	541280	A.102	621510	A.81	922330	A.97
70140	A.54	380880	A.88	481060	A.9	541290	A.102	621520	A.82	922340	A.97
70L50	A.55	380890	A.88	481100	A.9	541300	A.103	621530	A.82	922350	A.98
80160	A.55	380900	A.89	481110	A.9	541310	A.103	621540	A.83	922360	A.99
80170	A.55	390890	A.105	481120	A.10	541320	A.103	631510	A.25	922370	A.99
90190	A.28	390910	A.105	481130	A.10	541330	A.104	631520	A.25	922380	A.100
110230	A.48	400000	A.106	481140	A.10	541340	A.104	631530	A.26	932370	A.53
120000	A.44	400900	A.106	481151	A.11	541350	A.104	631540	A.26	932380	A.53
130270	A.2	400910	A.107	481160	A.11	541360	A.105	631550	A.27	942360	A.63
140000	A.79	400920	A.107	491130	A.36	551330	A.20	631560	A.27	942370	A.63
150310	A.69	400930	A.107	491150	A.37	551340	A.20	631570	A.28	942380	A.64
160320	A.89	400940	A.108	491150	A.37	551350	A.20	641520	A.29	942390	A.65
170000	A.13	400950	A.108	501120	A.83	551360	A.21	641540	A.29	942390	A.65
190000	A.39	400960	A.108	501140	A.83	551370	A.21	641550	A.29	942400	A.66
220000	A.96	410930	A.48	501150	A.84	561340	A.4	641560	A.30	942410	A.67
230000	A.101	410940	A.48	501160	A.84	561350	A.5	641570	A.30	942420	A.67
240000	A.19	410950	A.49	501170	A.84	561360	A.5	641580	A.31	942430	A.68
250550	A.44	420000	A.45	501180	A.85	561370	A.5	641600	A.31	942440	A.69
260000	A.28	420920	A.45	501190	A.85	561380	A.6	651590	A.90	952410	A.2
270590	A.19	420940	A.45	501200	A.85	561400	A.6	651600	A.91	952420	A.3
290000	A.21	420950	A.46	501220	A.86	571390	A.42	661600	A.22	952430	A.3
290630	A.22	420960	A.46	501240	A.86	571400	A.42	661610	A.23	962410	A.14
320720	A.31	420970	A.46	501250	A.86	581400	A.11	661620	A.23	962420	A.14
320730	A.32	420980	A.47	501260	A.87	581410	A.12	661630	A.23	962430	A.15
320740	A.32	420990	A.47	511210	A.75	581420	A.12	661640	A.24	962440	A.16
320760	A.32	421000	A.47	511230	A.75	581430	A.12	671650	A.35	962450	A.16
330750	A.4	430990	A.91	511240	A.76	581440	A.13	681660	A.24	962460	A.17
340740	A.77	440960	A.74	511250	A.76	591410	A.61	681670	A.24	962470	A.18
340760	A.77	440980	A.74	511260	A.76	591420	A.62	711750	A.44	962480	A.18
340770	A.77	440990	A.75	521200	A.91	591430	A.62	720000	A.33		
340780	A.78	441000	A.72	521220	A.92	601420	A.49	721740	A.34		
340800	A.78	441010	A.72	521230	A.92	601430	A.49	721770	A.34		
340820	A.78	441020	A.72	521240	A.92	601440	A.50	721780	A.34		
350790	A.7	441030	A.73	521250	A.93	601450	A.50	721790	A.35		
350810	A.7	441040	A.73	521260	A.93	601460	A.51	721800	A.35		
360780	A.40	441050	A.73	521271	A.93	601470	A.52	731810	A.90		
360800	A.40	441060	A.74	521280	A.94	601500	A.52	731820	A.90		
360820	A.40	451030	A.71	521291	A.94	611470	A.59	741830	A.101		

TABLE 1(C): LIST OF MATERIALS BY ENDF/B IDENTIFIER

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
302	A.106	1331	A.40	1387	A.107	9163	A.70	9477	A.37	9725	A.12
1031	A.24	1332	A.40	1388	A.108	9179	A.87	9513	A.83	9726	A.12
1032	A.44	1333	A.41	1389	A.108	9182	A.87	9516	A.83	9727	A.12
1083	A.70	1334	A.41	1390	A.95	9183	A.88	9517	A.84	9728	A.13
1084	A.71	1335	A.101	1391	A.57	9185	A.88	9518	A.84	9742	A.61
1127	A.90	1336	A.42	1393	A.97	9186	A.88	9519	A.84	9743	A.62
1146	A.33	1337	A.53	1394	A.97	9187	A.89	9521	A.85	9745	A.62
1149	A.13	1338	A.64	1395	A.98	9202	A.105	9522	A.85	9763	A.49
1150	A.39	1339	A.102	1396	A.99	9206	A.105	9524	A.85	9764	A.49
1160	A.8	1340	A.106	1398	A.100	9232	A.107	9527	A.86	9765	A.50
1189	A.48	1342	A.67	1399	A.65	9234	A.108	9530	A.86	9766	A.50
1270	A.33	1343	A.15	1399	A.65	9251	A.48	9531	A.86	9767	A.51
1272	A.43	1344	A.16	1407	A.1	9253	A.49	9533	A.87	9768	A.52
1275	A.54	1345	A.16	1409	A.1	9278	A.45	9548	A.75	9771	A.52
1276	A.55	1346	A.17	1476	A.101	9281	A.45	9551	A.75	9783	A.59
1285	A.90	1348	A.102	6435	A.22	9282	A.46	9552	A.76	9784	A.60
1292	A.25	1349	A.102	6437	A.37	9283	A.46	9555	A.76	9785	A.60
1293	A.26	1350	A.103	8030	A.95	9284	A.46	9556	A.76	9786	A.61
1294	A.104	1351	A.103	8131	A.56	9285	A.47	9576	A.91	9788	A.61
1301	A.36	1352	A.103	8232	A.96	9286	A.47	9579	A.92	9803	A.79
1302	A.36	1353	A.6	8237	A.99	9287	A.47	9580	A.92	9806	A.79
1303	A.43	1354	A.104	8338	A.53	9325	A.74	9582	A.92	9807	A.80
1304	A.6	1355	A.20	8436	A.63	9327	A.74	9583	A.93	9809	A.81
1305	A.7	1356	A.105	8437	A.63	9328	A.75	9585	A.93	9810	A.81
1306	A.22	1357	A.25	8443	A.68	9329	A.72	9587	A.93	9811	A.82
1307	A.55	1359	A.26	8444	A.69	9330	A.72	9588	A.94	9812	A.82
1308	A.91	1361	A.2	8542	A.3	9331	A.72	9590	A.94	9813	A.83
1309	A.28	1362	A.29	8641	A.14	9332	A.73	9591	A.94	9832	A.27
1310	A.71	1363	A.3	8642	A.14	9333	A.73	9594	A.95	9833	A.27
1311	A.48	1364	A.29	8647	A.18	9334	A.73	9606	A.37	9834	A.28
1312	A.44	1365	A.29	8648	A.18	9335	A.74	9608	A.38	9857	A.90
1313	A.2	1366	A.30	9050	A.31	9355	A.71	9609	A.38	9858	A.91
1314	A.79	1367	A.30	9051	A.32	9379	A.57	9611	A.38	9864	A.22
1315	A.69	1368	A.31	9053	A.32	9381	A.58	9618	A.39	9865	A.23
1316	A.89	1370	A.31	9056	A.32	9382	A.58	9643	A.104	9866	A.23
1317	A.55	1372	A.33	9071	A.4	9383	A.58	9663	A.20	9867	A.23
1318	A.10	1374	A.34	9089	A.77	9386	A.59	9665	A.20	9872	A.35
1319	A.80	1377	A.34	9091	A.77	9389	A.59	9667	A.21	9875	A.24
1321	A.45	1378	A.34	9092	A.77	9415	A.1	9669	A.21	9876	A.24
1322	A.96	1379	A.4	9094	A.78	9440	A.9	9684	A.4		
1323	A.101	1380	A.66	9097	A.78	9444	A.9	9685	A.5		
1324	A.19	1381	A.67	9100	A.78	9445	A.9	9687	A.5		
1325	A.44	1382	A.57	9113	A.7	9447	A.10	9689	A.5		
1326	A.28	1383	A.35	9117	A.7	9450	A.10	9693	A.6		
1327	A.19	1384	A.35	9145	A.41	9452	A.11	9707	A.42		
1329	A.21	1385	A.106	9160	A.69	9453	A.11	9708	A.42		
1330	A.40	1386	A.107	9161	A.70	9473	A.36	9724	A.11		

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TABLE 2(A): LIST OF MATERIALS ALPHABETICALLY (SEE MICROFICHE)

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
AG107	A.1	CS136	A.81	I129	A.150	PB-NAT	A.229	SB126	A.306	TE127M	A.374
AG109	A.2	CS137	A.82	I130	A.151	PD102	A.230	SE74	A.308	TE128	A.376
AG111	A.3	CU-NAT	A.83	I131	A.152	PD104	A.232	SE76	A.309	TE129M	A.377
AL27	A.5	CU63	A.85	I135	A.154	PD105	A.233	SE77	A.310	TE130	A.378
AM241	A.6	C12	A.86	K-NAT	A.155	PD106	A.234	SE78	A.312	TE132	A.380
AM242G	A.9	DY160	A.87	KR78	A.158	PD108	A.236	SE80	A.313	TH230	A.381
AM243	A.11	DY161	A.89	KR80	A.159	PD110	A.237	SE82	A.314	TH232	A.382
AS75	A.13	DY162	A.90	KR82	A.160	PM147	A.238	SI-NAT	A.316	TI-NAT	A.384
AU197	A.14	DY163	A.91	KR83	A.162	PM148G	A.241	SM144	A.317	U232	A.385
BA134	A.15	DY164	A.93	KR84	A.163	PM148M	A.242	SM147	A.318	U233	A.388
BA135	A.17	ER166	A.94	KR85	A.164	PM149	A.244	SM148	A.321	U234	A.390
BA136	A.18	ER167	A.96	KR86	A.166	PM151	A.245	SM149	A.322	U235	A.393
BA137	A.19	EU151	A.98	LA139	A.167	PR141	A.246	SM150	A.324	U236	A.396
BA138	A.21	EU152	A.99	LA140	A.168	PR142	A.249	SM151	A.325	U237	A.398
BA140	A.22	EU153	A.102	LI6	A.170	PR143	A.250	SM152	A.328	U238	A.401
BE9	A.23	EU154	A.104	LI7	A.172	PU236	A.252	SM153	A.330	V-NAT	A.404
BR79	A.25	EU155	A.106	LU175	A.174	PU237	A.254	SM154	A.332	W183	A.405
BR81	A.26	EU156	A.108	MG-NAT	A.175	PU238	A.257	SN112	A.333	XE124	A.406
B10	A.27	EU157	A.110	MN55	A.176	PU239	A.260	SN114	A.334	XE126	A.408
B11	A.31	FE-NAT	A.111	MO-NAT	A.178	PU239	A.262	SN115	A.336	XE128	A.409
CD106	A.33	F19	A.112	MO92	A.179	PU240	A.265	SN116	A.337	XE129	A.410
CD110	A.34	GD152	A.114	MO94	A.180	PU241	A.268	SN117	A.338	XE130	A.412
CD111	A.35	GD154	A.115	MO95	A.182	PU242	A.270	SN118	A.340	XE131	A.413
CD112	A.37	GD155	A.116	MO96	A.183	PU243	A.273	SN119	A.341	XE132	A.414
CD113	A.38	GD156	A.118	MO97	A.184	PU244	A.276	SN120	A.342	XE133	A.416
CD114	A.39	GD157	A.120	MO98	A.186	P31	A.277	SN122	A.344	XE134	A.417
CD115M	A.41	GD158	A.122	MO99	A.187	RB85	A.278	SN124	A.345	XE135	A.418
CD116	A.42	GD160	A.123	MO100	A.188	RB86	A.280	SN125	A.346	XE136	A.420
CS140	A.43	GE72	A.124	NA23	A.190	RB87	A.281	SN126	A.348	Y89	A.421
CE141	A.45	GE73	A.126	NB93	A.191	RE185	A.282	SR84	A.349	Y91	A.423
CE142	A.46	GE74	A.127	NB94	A.192	RE187	A.284	SR86	A.350	ZR-II	A.425
CE143	A.47	GE76	A.128	NB95	A.194	RH103	A.285	SR87	A.352	ZR-NAT	A.426
CE144	A.49	HE3	A.130	ND142	A.195	RH105	A.286	SR88	A.353	ZR90	A.427
CL-NAT	A.50	HE4	A.131	ND143	A.196	RU100	A.288	SR89	A.354	ZR91	A.429
CM241	A.53	HF-NAT	A.132	ND144	A.199	RU101	A.289	SR90	A.356	ZR92	A.430
CM242	A.55	HF174	A.134	ND145	A.200	RU102	A.290	S32	A.357	ZR93	A.431
CM243	A.58	HF177	A.135	ND146	A.203	RU103	A.292	TA181	A.360	ZR94	A.433
CM244	A.61	HF178	A.136	ND147	A.206	RU104	A.293	TA182	A.361	ZR95	A.434
CM245	A.63	HF179	A.138	ND150	A.209	RU105	A.294	TB159	A.362	ZR96	A.436
CM246	A.66	HF180	A.139	NP237	A.212	RU106	A.296	TB160	A.364		
CM247	A.69	HO165	A.140	NP238	A.214	RU96	A.297	TC99	A.365		
CM248	A.71	H1	A.142	N14	A.217	RU98	A.298	TE120	A.366		
CO59	A.74	H2	A.143	N15	A.220	RU99	A.300	TE122	A.368		
CR-NAT	A.75	IN113	A.144	O16	A.221	SB121	A.301	TE123	A.369		
CS133	A.77	IN115	A.146	O17	A.222	SB123	A.302	TE124	A.370		
CS134	A.78	IN115	A.147	PA231	A.225	SB124	A.304	TE125	A.372		
CS135	A.79	I127	A.148	PA233	A.228	SB125	A.305	TE126	A.373		

TABLE 2(B): LISTED BY (Z,A) IDENTIFIER (SEE MICROFICHE)

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
10010	A.142	360830	A.162	451050	A.286	521300	A.378	611480	A.241	751850	A.282
10020	A.143	360840	A.163	461020	A.230	521320	A.380	611481	A.242	751870	A.284
20030	A.130	360850	A.164	461040	A.232	531270	A.148	611490	A.244	791970	A.14
20040	A.131	360860	A.166	461050	A.233	531290	A.150	611510	A.245	820000	A.229
30060	A.170	370850	A.278	461060	A.234	531300	A.151	621440	A.317	902300	A.381
30070	A.172	370860	A.280	461080	A.236	531310	A.152	621470	A.318	902320	A.382
40090	A.23	370870	A.281	461100	A.237	531350	A.154	621480	A.321	912310	A.225
50100	A.27	380840	A.349	471070	A.1	541240	A.406	621490	A.322	912330	A.228
50110	A.31	380860	A.350	471090	A.2	541260	A.408	621500	A.324	922320	A.385
60000	A.86	380870	A.352	471110	A.3	541280	A.409	621510	A.325	922330	A.388
70140	A.217	380880	A.353	481060	A.33	541290	A.410	621520	A.328	922340	A.390
70150	A.220	380890	A.354	481100	A.34	541300	A.412	621530	A.330	922350	A.393
80160	A.221	380900	A.356	481110	A.35	541310	A.413	621540	A.332	922360	A.396
80170	A.222	390890	A.421	481120	A.37	541320	A.414	631510	A.98	922370	A.396
90190	A.112	390910	A.423	481130	A.38	541330	A.416	631520	A.99	922380	A.401
110230	A.190	400000	A.426	481140	A.39	541340	A.417	631530	A.102	932370	A.212
120000	A.175	400900	A.427	481151	A.41	541350	A.418	631540	A.104	932380	A.214
130270	A.5	400910	A.429	481160	A.42	541360	A.420	631550	A.106	942360	A.252
140000	A.316	400920	A.430	491130	A.144	551330	A.77	631560	A.108	942370	A.254
150310	A.277	400930	A.431	491150	A.146	551340	A.78	631570	A.110	942370	A.257
160320	A.357	400940	A.433	491150	A.147	551350	A.79	641520	A.114	942380	A.260
170000	A.50	400950	A.434	501120	A.333	551360	A.81	641540	A.115	942390	A.262
190000	A.155	400960	A.436	501140	A.334	551370	A.82	641550	A.116	942400	A.265
220000	A.384	410930	A.191	501150	A.336	561340	A.15	641560	A.118	942410	A.268
230000	A.404	410940	A.192	501160	A.337	561350	A.17	641570	A.120	942420	A.270
240000	A.75	410950	A.194	501170	A.338	561360	A.18	641580	A.122	942430	A.273
250550	A.176	420000	A.178	501180	A.340	561370	A.19	651590	A.362	942440	A.276
260000	A.111	420920	A.179	501190	A.341	561380	A.21	651600	A.364	952410	A.6
270590	A.74	420940	A.180	501200	A.342	561390	A.22	661600	A.87	952420	A.9
290000	A.83	420950	A.182	501220	A.344	571390	A.167	661610	A.89	952430	A.11
290630	A.85	420960	A.183	501240	A.345	571400	A.168	661620	A.90	962410	A.53
320720	A.124	420970	A.184	501250	A.346	581400	A.43	661630	A.91	962420	A.55
320730	A.126	420980	A.186	501260	A.348	581410	A.45	661640	A.93	962430	A.58
320740	A.127	420990	A.187	511210	A.301	581420	A.46	671650	A.140	962440	A.61
320760	A.128	421000	A.188	511230	A.302	581430	A.47	681660	A.94	962450	A.63
330750	A.13	430990	A.365	511240	A.304	581440	A.49	681670	A.96	962460	A.66
340740	A.308	440960	A.297	511250	A.305	591410	A.246	711750	A.174	962470	A.69
340760	A.309	440980	A.298	511260	A.306	591420	A.249	720000	A.132	962480	A.71
340770	A.310	440990	A.300	521200	A.366	591430	A.250	721740	A.134		
340780	A.312	441000	A.288	521220	A.368	601420	A.195	721770	A.135		
340800	A.313	441010	A.289	521230	A.369	601430	A.196	721780	A.136		
340820	A.314	441020	A.290	521240	A.370	601440	A.199	721790	A.138		
350790	A.25	441030	A.292	521250	A.372	601450	A.200	721800	A.139		
350810	A.26	441040	A.293	521260	A.373	601460	A.203	731810	A.360		
360780	A.158	441050	A.294	521271	A.374	601470	A.206	731820	A.361		
360800	A.159	441060	A.296	521280	A.376	601500	A.209	741830	A.405		
360820	A.160	451030	A.285	521291	A.377	611470	A.238				

TABLE 2(C): LIST OF MATERIALS BY ENDF/B IDENTIFIER (SEE MICROFICHE)

MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE	MAT	PAGE
302	A.425	1331	A.159	1387	A.430	9163	A.281	9477	A.146	9725	A.45
1031	A.93	1332	A.160	1388	A.433	9179	A.349	9513	A.333	9726	A.46
1032	A.174	1333	A.162	1389	A.436	9182	A.350	9516	A.334	9727	A.47
1083	A.282	1334	A.163	1390	A.382	9183	A.352	9517	A.336	9728	A.49
1084	A.284	1335	A.406	1391	A.228	9185	A.353	9518	A.337	9742	A.246
1127	A.361	1336	A.166	1393	A.388	9186	A.354	9519	A.338	9743	A.249
1146	A.130	1337	A.212	1394	A.390	9187	A.356	9521	A.340	9745	A.250
1149	A.50	1338	A.257	1395	A.393	9202	A.421	9522	A.341	9763	A.195
1150	A.155	1339	A.408	1396	A.396	9206	A.423	9524	A.342	9764	A.196
1160	A.31	1340	A.426	1398	A.401	9232	A.431	9527	A.344	9765	A.199
1189	A.191	1342	A.270	1399	A.262	9234	A.434	9530	A.345	9766	A.200
1270	A.131	1343	A.58	1399	A.260	9251	A.192	9531	A.346	9767	A.203
1272	A.172	1344	A.61	1407	A.1	9253	A.194	9533	A.348	9768	A.206
1275	A.217	1345	A.63	1409	A.2	9278	A.179	9548	A.301	9771	A.209
1276	A.221	1346	A.66	1476	A.405	9281	A.180	9551	A.302	9783	A.238
1285	A.360	1348	A.409	6435	A.85	9282	A.182	9552	A.304	9784	A.241
1292	A.99	1349	A.410	6437	A.147	9283	A.183	9555	A.305	9785	A.242
1293	A.104	1350	A.412	8030	A.381	9284	A.184	9556	A.306	9786	A.244
1294	A.418	1351	A.413	8131	A.225	9285	A.186	9576	A.366	9788	A.245
1301	A.142	1352	A.414	8232	A.385	9286	A.187	9579	A.368	9803	A.317
1302	A.143	1353	A.21	8237	A.398	9287	A.188	9580	A.369	9806	A.318
1303	A.170	1354	A.417	8338	A.214	9325	A.297	9582	A.370	9807	A.321
1304	A.23	1355	A.77	8436	A.252	9327	A.298	9583	A.372	9809	A.324
1305	A.27	1356	A.420	8437	A.254	9328	A.300	9585	A.373	9810	A.325
1306	A.86	1357	A.98	8443	A.273	9329	A.288	9587	A.374	9811	A.328
1307	A.220	1359	A.102	8444	A.276	9330	A.289	9588	A.376	9812	A.330
1308	A.365	1361	A.6	8542	A.9	9331	A.290	9590	A.377	9813	A.332
1309	A.112	1362	A.114	8641	A.53	9332	A.292	9591	A.378	9832	A.106
1310	A.285	1363	A.11	8642	A.55	9333	A.293	9594	A.380	9833	A.108
1311	A.190	1364	A.115	8647	A.69	9334	A.294	9606	A.148	9834	A.110
1312	A.175	1365	A.116	8648	A.71	9335	A.296	9608	A.150	9857	A.362
1313	A.5	1366	A.118	9050	A.124	9355	A.286	9609	A.151	9858	A.364
1314	A.316	1367	A.120	9051	A.126	9379	A.230	9611	A.152	9864	A.87
1315	A.277	1368	A.122	9053	A.127	9381	A.232	9618	A.154	9865	A.89
1316	A.357	1370	A.123	9056	A.128	9382	A.233	9643	A.416	9866	A.90
1317	A.222	1372	A.132	9071	A.13	9383	A.234	9663	A.78	9867	A.91
1318	A.38	1374	A.134	9089	A.308	9386	A.236	9665	A.79	9872	A.140
1319	A.322	1377	A.135	9091	A.309	9389	A.237	9667	A.81	9875	A.94
1321	A.178	1378	A.136	9092	A.310	9415	A.3	9669	A.82	9876	A.96
1322	A.384	1379	A.14	9094	A.312	9440	A.33	9684	A.15		
1323	A.404	1380	A.265	9097	A.313	9444	A.34	9685	A.17		
1324	A.75	1381	A.268	9100	A.314	9445	A.35	9687	A.18		
1325	A.176	1382	A.229	9113	A.25	9447	A.37	9689	A.19		
1326	A.111	1383	A.138	9117	A.26	9450	A.39	9693	A.22		
1327	A.74	1384	A.139	9145	A.164	9452	A.41	9707	A.167		
1329	A.83	1385	A.427	9160	A.278	9453	A.42	9708	A.168		
1330	A.158	1386	A.429	9161	A.280	9473	A.144	9724	A.43		

$\Delta_4(E,T)$ AS A FUNCTION
OF E AT 100 (K) INTERVALS

FIGURE 1
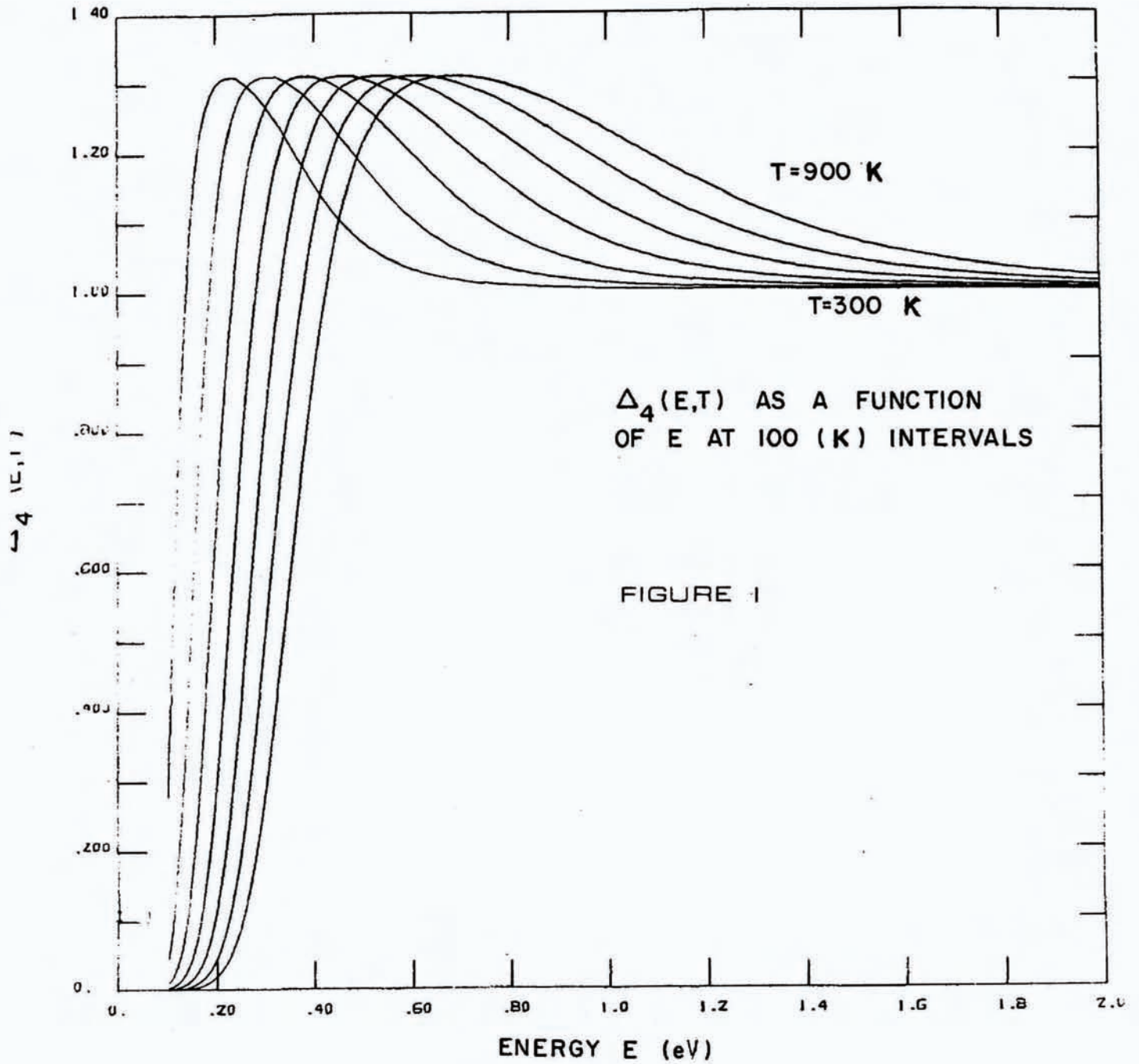
- A.1 -

--- MAT AG107   (471070) ENDF ID (1407)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7416E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3765E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4507E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1900E+01	.1742E+02	.9988E+00	.6052E+00	.2522E+01	.1013E+01	.8183E+00	.4973E+01
20	.1127E+01	.1899E+01	.1797E+02	.9984E+00	.5910E+00	.2613E+01	.1020E+01	.8063E+00	.5139E+01
80	.1236E+01	.1880E+01	.1949E+02	.9972E+00	.5505E+00	.2871E+01	.1037E+01	.7693E+00	.5605E+01
140	.1337E+01	.1839E+01	.2087E+02	.9960E+00	.5122E+00	.3107E+01	.1052E+01	.7305E+00	.6031E+01
200	.1430E+01	.1779E+01	.2214E+02	.9948E+00	.4752E+00	.3328E+01	.1066E+01	.6897E+00	.6424E+01
260	.1517E+01	.1703E+01	.2332E+02	.9935E+00	.4392E+00	.3535E+01	.1080E+01	.6472E+00	.6791E+01
320	.1600E+01	.1616E+01	.2443E+02	.9923E+00	.4042E+00	.3731E+01	.1092E+01	.6037E+00	.7137E+01
380	.1678E+01	.1521E+01	.2548E+02	.9911E+00	.3704E+00	.3918E+01	.1104E+01	.5598E+00	.7465E+01
440	.1752E+01	.1421E+01	.2647E+02	.9898E+00	.3379E+00	.4096E+01	.1115E+01	.5161E+00	.7777E+01
520	.1846E+01	.1282E+01	.2772E+02	.9880E+00	.2966E+00	.4323E+01	.1129E+01	.4587E+00	.8172E+01
600	.1933E+01	.1139E+01	.2890E+02	.9860E+00	.2576E+00	.4539E+01	.1142E+01	.4027E+00	.8547E+01

--- MAT AG109   (471090) ENDF ID (1409)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2231E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9072E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9295E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1846E+01	.1154E+03	.1005E+01	.6875E+00	.1722E+02	.1007E+01	.7153E+00	.1958E+02
20	.1124E+01	.1843E+01	.1195E+03	.1006E+01	.6752E+00	.1784E+02	.1009E+01	.7032E+00	.2028E+02
80	.1232E+01	.1819E+01	.1310E+03	.1009E+01	.6391E+00	.1957E+02	.1015E+01	.6674E+00	.2225E+02
140	.1331E+01	.1774E+01	.1414E+03	.1012E+01	.6032E+00	.2117E+02	.1020E+01	.6313E+00	.2405E+02
200	.1422E+01	.1712E+01	.1512E+03	.1015E+01	.5670E+00	.2265E+02	.1025E+01	.5945E+00	.2573E+02
260	.1507E+01	.1636E+01	.1603E+03	.1019E+01	.5303E+00	.2403E+02	.1030E+01	.5569E+00	.2730E+02
320	.1587E+01	.1549E+01	.1689E+03	.1022E+01	.4934E+00	.2534E+02	.1035E+01	.5188E+00	.2879E+02
380	.1663E+01	.1455E+01	.1771E+03	.1025E+01	.4567E+00	.2659E+02	.1040E+01	.4807E+00	.3020E+02
440	.1734E+01	.1356E+01	.1849E+03	.1028E+01	.4205E+00	.2778E+02	.1045E+01	.4430E+00	.3155E+02
520	.1824E+01	.1221E+01	.1948E+03	.1032E+01	.3732E+00	.2929E+02	.1051E+01	.3935E+00	.3326E+02
600	.1908E+01	.1083E+01	.2042E+03	.1036E+01	.3274E+00	.3073E+02	.1056E+01	.3455E+00	.3489E+02

--- MAT AG111   (471110) ENDF ID (9415)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4223E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3000E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7223E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2147E+02	.1001E-01	.6277E+00	.3721E+02	.1052E+01	.1383E+01	.2801E+02
20	.1128E+01	.1920E+01	.2217E+02	.1001E+01	.6139E+00	.3855E+02	.1075E+01	.1377E+01	.2897E+02
80	.1236E+01	.1902E+01	.2410E+02	.1001E+01	.5745E+00	.4231E+02	.1140E+01	.1350E+01	.3166E+02
140	.1339E+01	.1862E+01	.2586E+02	.1001E+01	.5367E+00	.4576E+02	.1199E+01	.1311E+01	.3412E+02
200	.1433E+01	.1802E+01	.2748E+02	.1001E+01	.4997E+00	.4898E+02	.1254E+01	.1261E+01	.3641E+02
260	.1521E+01	.1727E+01	.2898E+02	.1001E+01	.4634E+00	.5199E+02	.1305E+01	.1202E+01	.3854E+02
320	.1605E+01	.1640E+01	.3040E+02	.1001E+01	.4278E+00	.5484E+02	.1354E+01	.1137E+01	.4055E+02
380	.1684E+01	.1545E+01	.3174E+02	.1001E+01	.3931E+00	.5754E+02	.1400E+01	.1066E+01	.4246E+02
440	.1759E+01	.1444E+01	.3301E+02	.1001E+01	.3595E+00	.6013E+02	.1444E+01	.9933E+00	.4427E+02
520	.1854E+01	.1303E+01	.3462E+02	.1001E+01	.3165E+00	.6341E+02	.1500E+01	.8932E+00	.4658E+02
600	.1943E+01	.1159E+01	.3613E+02	.1000E+01	.2756E+00	.6654E+02	.1551E+01	.7922E+00	.4876E+02

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--- MAT AL27   (130270) ENDF ID (1313)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1348E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2320E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1580E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.2724E+02	.1002E+01	.6286E+00	.1291E+00	.1076E+01	.1729E+01	.2326E+02
20	.1128E+01	.1918E+01	.2814E+02	.1002E+01	.6148E+00	.1336E+00	.1109E+01	.1727E+01	.2403E+02
80	.1238E+01	.1900E+01	.3066E+02	.1002E+01	.5752E+00	.1462E+00	.1203E+01	.1706E+01	.2618E+02
140	.1339E+01	.1860E+01	.3295E+02	.1002E+01	.5374E+00	.1579E+00	.1289E+01	.1666E+01	.2814E+02
200	.1433E+01	.1801E+01	.3507E+02	.1002E+01	.5003E+00	.1688E+00	.1370E+01	.1610E+01	.2994E+02
260	.1521E+01	.1726E+01	.3704E+02	.1003E+01	.4639E+00	.1790E+00	.1445E+01	.1541E+01	.3163E+02
320	.1604E+01	.1639E+01	.3890E+02	.1003E+01	.4282E+00	.1887E+00	.1516E+01	.1461E+01	.3322E+02
380	.1683E+01	.1544E+01	.4066E+02	.1003E+01	.3934E+00	.1978E+00	.1583E+01	.1375E+01	.3472E+02
440	.1758E+01	.1442E+01	.4233E+02	.1003E+01	.3598E+00	.2067E+00	.1647E+01	.1283E+01	.3615E+02
520	.1853E+01	.1302E+01	.4445E+02	.1002E+01	.3167E+00	.2180E+00	.1728E+01	.1157E+01	.3795E+02
600	.1942E+01	.1158E+01	.4645E+02	.1002E+01	.2758E+00	.2290E+00	.1804E+01	.1029E+01	.3966E+02

--- MAT AM241   (952410) ENDF ID (1361)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1005E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .3273E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5764E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1059E+01	.1835E+01	.1976E+02	.9991E+00	.3209E+01	.4307E+01	.1055E+01	.3417E+01	.4633E+01
20	.1092E+01	.1845E+01	.2041E+02	.9972E+00	.3331E+01	.4515E+01	.1052E+01	.3544E+01	.4853E+01
80	.1183E+01	.1865E+01	.2225E+02	.1002E+01	.3637E+01	.5048E+01	.1057E+01	.3874E+01	.5430E+01
140	.1262E+01	.1872E+01	.2394E+02	.1029E+01	.3853E+01	.5436E+01	.1084E+01	.4122E+01	.5874E+01
200	.1335E+01	.1864E+01	.2551E+02	.1084E+01	.3961E+01	.5659E+01	.1137E+01	.4268E+01	.6160E+01
260	.1402E+01	.1840E+01	.2698E+02	.1170E+01	.3936E+01	.5686E+01	.1220E+01	.4287E+01	.6258E+01
320	.1466E+01	.1797E+01	.2835E+02	.1283E+01	.3766E+01	.5506E+01	.1329E+01	.4164E+01	.6154E+01
380	.1529E+01	.1731E+01	.2963E+02	.1422E+01	.3468E+01	.5144E+01	.1463E+01	.3917E+01	.5873E+01
440	.1591E+01	.1642E+01	.3083E+02	.1581E+01	.3093E+01	.4670E+01	.1616E+01	.3593E+01	.5478E+01
520	.1673E+01	.1497E+01	.3232E+02	.1813E+01	.2581E+01	.4000E+01	.1841E+01	.3138E+01	.4900E+01
600	.1754E+01	.1336E+01	.3370E+02	.2058E+01	.2144E+01	.3402E+01	.2081E+01	.2740E+01	.4368E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .5897E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .5796E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1055E+01	.3388E+01	.4889E+01	.1055E+01	.3415E+01	.4631E+01
20	.1053E+01	.3514E+01	.5117E+01	.1052E+01	.3543E+01	.4851E+01
80	.1059E+01	.3838E+01	.5715E+01	.1056E+01	.3872E+01	.5428E+01
140	.1086E+01	.4082E+01	.6179E+01	.1083E+01	.4120E+01	.5871E+01
200	.1140E+01	.4225E+01	.6487E+01	.1137E+01	.4266E+01	.6157E+01
260	.1222E+01	.4243E+01	.6608E+01	.1219E+01	.4285E+01	.6255E+01
320	.1331E+01	.4122E+01	.6529E+01	.1329E+01	.4162E+01	.6151E+01
380	.1464E+01	.3877E+01	.6274E+01	.1463E+01	.3915E+01	.5869E+01
440	.1615E+01	.3557E+01	.5906E+01	.1615E+01	.3590E+01	.5474E+01
520	.1838E+01	.3107E+01	.5362E+01	.1841E+01	.3135E+01	.4895E+01
600	.2075E+01	.2713E+01	.4862E+01	.2081E+01	.2737E+01	.4362E+01

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--- MAT AM242G (952420) ENDF ID (8542)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2895E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .2271E+04 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2523E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1079E+01	.1735E+01	.6981E+01	.9922E+00	.5228E+00	-.2871E+00	.9921E+00	.5228E+00	-.2737E+00
20	.1116E+01	.1729E+01	.7155E+01	.9900E+00	.5073E+00	-.2931E+00	.9900E+00	.5073E+00	-.2792E+00
80	.1220E+01	.1697E+01	.7632E+01	.9835E+00	.4641E+00	-.3084E+00	.9835E+00	.4641E+00	-.2931E+00
140	.1314E+01	.1647E+01	.8055E+01	.9772E+00	.4248E+00	-.3204E+00	.9772E+00	.4248E+00	-.3039E+00
200	.1400E+01	.1583E+01	.8438E+01	.9709E+00	.3883E+00	-.3300E+00	.9709E+00	.3883E+00	-.3122E+00
260	.1480E+01	.1506E+01	.8788E+01	.9648E+00	.3542E+00	-.3375E+00	.9648E+00	.3542E+00	-.3186E+00
320	.1555E+01	.1422E+01	.9112E+01	.9587E+00	.3221E+00	-.3433E+00	.9587E+00	.3221E+00	-.3234E+00
380	.1625E+01	.1331E+01	.9414E+01	.9527E+00	.2919E+00	-.3478E+00	.9527E+00	.2919E+00	-.3269E+00
440	.1691E+01	.1238E+01	.9697E+01	.9468E+00	.2637E+00	-.3510E+00	.9468E+00	.2636E+00	-.3293E+00
520	.1773E+01	.1110E+01	.1005E+02	.9390E+00	.2286E+00	-.3538E+00	.9390E+00	.2286E+00	-.3308E+00
600	.1848E+01	.9822E+00	.1038E+02	.9312E+00	.1964E+00	-.3549E+00	.9312E+00	.1964E+00	-.3308E+00

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2552E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2523E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9931E+00	.5366E+00	-.2034E+00	.9922E+00	.5228E+00	-.2858E+00
20	.9914E+00	.5211E+00	-.2073E+00	.9900E+00	.5073E+00	-.2917E+00
80	.9862E+00	.4780E+00	-.2168E+00	.9835E+00	.4641E+00	-.3069E+00
140	.9810E+00	.4386E+00	-.2238E+00	.9772E+00	.4248E+00	-.3188E+00
200	.9758E+00	.4019E+00	-.2287E+00	.9709E+00	.3883E+00	-.3282E+00
260	.9706E+00	.3672E+00	-.2321E+00	.9648E+00	.3542E+00	-.3356E+00
320	.9655E+00	.3345E+00	-.2341E+00	.9587E+00	.3221E+00	-.3413E+00
380	.9604E+00	.3037E+00	-.2350E+00	.9527E+00	.2919E+00	-.3457E+00
440	.9553E+00	.2747E+00	-.2349E+00	.9468E+00	.2637E+00	-.3488E+00
520	.9485E+00	.2386E+00	-.2335E+00	.9390E+00	.2286E+00	-.3515E+00
600	.9416E+00	.2054E+00	-.2307E+00	.9312E+00	.1964E+00	-.3525E+00

--- MAT AM243 (952430) ENDF ID (1363)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6965E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7476E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8173E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1082E+01	.1934E+01	.3124E+02	.1012E+01	.8840E+02	.1292E+03	.1018E+01	.8103E+02	.1208E+03
20	.1120E+01	.1934E+01	.3228E+02	.1015E+01	.8838E+02	.1301E+03	.1023E+01	.8101E+02	.1218E+03
80	.1225E+01	.1916E+01	.3521E+02	.1023E+01	.8755E+02	.1318E+03	.1040E+01	.8026E+02	.1236E+03
140	.1321E+01	.1875E+01	.3788E+02	.1032E+01	.8571E+02	.1322E+03	.1057E+01	.7857E+02	.1241E+03
200	.1409E+01	.1815E+01	.4036E+02	.1042E+01	.8298E+02	.1314E+03	.1073E+01	.7606E+02	.1236E+03
260	.1490E+01	.1740E+01	.4269E+02	.1053E+01	.7952E+02	.1296E+03	.1090E+01	.7290E+02	.1222E+03
320	.1567E+01	.1652E+01	.4491E+02	.1066E+01	.7552E+02	.1272E+03	.1108E+01	.6922E+02	.1202E+03
380	.1638E+01	.1556E+01	.4704E+02	.1079E+01	.7112E+02	.1244E+03	.1127E+01	.6520E+02	.1178E+03
440	.1705E+01	.1454E+01	.4910E+02	.1095E+01	.6646E+02	.1213E+03	.1147E+01	.6092E+02	.1152E+03
520	.1789E+01	.1312E+01	.5179E+02	.1117E+01	.5999E+02	.1170E+03	.1174E+01	.5499E+02	.1115E+03
600	.1866E+01	.1168E+01	.5442E+02	.1142E+01	.5337E+02	.1127E+03	.1204E+01	.4892E+02	.1077E+03

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--- MAT AS75 (330750) ENDF ID (9071)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1719E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4301E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6020E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.8536E+02	.1001E+01	.6301E+00	.1512E+02	.1026E+01	.9980E+00	.3518E+02
20	.1128E+01	.1918E+01	.8835E+02	.1001E+01	.6164E+00	.1566E+02	.1038E+01	.9880E+00	.3642E+02
80	.1238E+01	.1900E+01	.9674E+02	.1002E+01	.5771E+00	.1719E+02	.1069E+01	.9548E+00	.3991E+02
140	.1339E+01	.1859E+01	.1044E+03	.1002E+01	.5394E+00	.1860E+02	.1098E+01	.9163E+00	.4311E+02
200	.1433E+01	.1800E+01	.1116E+03	.1002E+01	.5024E+00	.1990E+02	.1125E+01	.8730E+00	.4608E+02
260	.1521E+01	.1725E+01	.1182E+03	.1002E+01	.4660E+00	.2113E+02	.1150E+01	.8256E+00	.4886E+02
320	.1604E+01	.1638E+01	.1246E+03	.1002E+01	.4304E+00	.2228E+02	.1174E+01	.7753E+00	.5149E+02
380	.1683E+01	.1542E+01	.1305E+03	.1002E+01	.3956E+00	.2338E+02	.1197E+01	.7232E+00	.5399E+02
440	.1758E+01	.1441E+01	.1363E+03	.1002E+01	.3619E+00	.2443E+02	.1218E+01	.6702E+00	.5637E+02
520	.1853E+01	.1301E+01	.1435E+03	.1002E+01	.3187E+00	.2577E+02	.1245E+01	.5992E+00	.5939E+02
600	.1942E+01	.1157E+01	.1504E+03	.1002E+01	.2777E+00	.2704E+02	.1270E+01	.5288E+00	.6226E+02

--- MAT AU197 (791970) ENDF ID (1379)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6839E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9871E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1055E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1863E+01	.6271E+02	.1005E+01	.6870E+00	.1679E+02	.1010E+01	.7633E+00	.1977E+02
20	.1125E+01	.1861E+01	.6489E+02	.1006E+01	.6747E+00	.1740E+02	.1014E+01	.7516E+00	.2047E+02
80	.1233E+01	.1838E+01	.7100E+02	.1009E+01	.6385E+00	.1909E+02	.1024E+01	.7163E+00	.2245E+02
140	.1333E+01	.1795E+01	.7659E+02	.1012E+01	.6027E+00	.2064E+02	.1033E+01	.6800E+00	.2427E+02
200	.1424E+01	.1733E+01	.8177E+02	.1015E+01	.5665E+00	.2209E+02	.1042E+01	.6421E+00	.2595E+02
260	.1510E+01	.1657E+01	.8662E+02	.1018E+01	.5299E+00	.2344E+02	.1050E+01	.6029E+00	.2753E+02
320	.1591E+01	.1570E+01	.9120E+02	.1021E+01	.4930E+00	.2472E+02	.1058E+01	.5628E+00	.2903E+02
380	.1668E+01	.1476E+01	.9554E+02	.1025E+01	.4564E+00	.2593E+02	.1066E+01	.5224E+00	.3044E+02
440	.1740E+01	.1377E+01	.9968E+02	.1028E+01	.4201E+00	.2709E+02	.1074E+01	.4821E+00	.3180E+02
520	.1831E+01	.1240E+01	.1049E+03	.1031E+01	.3729E+00	.2857E+02	.1083E+01	.4290E+00	.3351E+02
600	.1916E+01	.1101E+01	.1099E+03	.1035E+01	.3271E+00	.2997E+02	.1092E+01	.3772E+00	.3515E+02

--- MAT BA134 (561340) ENDF ID (9684)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4177E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2158E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6335E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.3276E+02	.1001E+01	.6283E+00	.1153E+02	.1059E+01	.1480E+01	.2553E+02
20	.1128E+01	.1919E+01	.3386E+02	.1001E+01	.6146E+00	.1195E+02	.1085E+01	.1475E+01	.2639E+02
80	.1238E+01	.1901E+01	.3693E+02	.1001E+01	.5751E+00	.1311E+02	.1157E+01	.1449E+01	.2882E+02
140	.1339E+01	.1861E+01	.3973E+02	.1001E+01	.5374E+00	.1418E+02	.1224E+01	.1410E+01	.3103E+02
200	.1433E+01	.1802E+01	.4233E+02	.1001E+01	.5004E+00	.1518E+02	.1286E+01	.1358E+01	.3308E+02
260	.1521E+01	.1726E+01	.4475E+02	.1001E+01	.4641E+00	.1611E+02	.1344E+01	.1296E+01	.3500E+02
320	.1605E+01	.1640E+01	.4703E+02	.1001E+01	.4285E+00	.1700E+02	.1399E+01	.1227E+01	.3680E+02
380	.1684E+01	.1544E+01	.4919E+02	.1001E+01	.3938E+00	.1783E+02	.1451E+01	.1152E+01	.3851E+02
440	.1759E+01	.1443E+01	.5125E+02	.1001E+01	.3601E+00	.1864E+02	.1501E+01	.1074E+01	.4014E+02
520	.1854E+01	.1302E+01	.5385E+02	.1001E+01	.3171E+00	.1965E+02	.1563E+01	.9666E+00	.4220E+02
600	.1942E+01	.1158E+01	.5631E+02	.1001E+01	.2761E+00	.2062E+02	.1622E+01	.8579E+00	.4415E+02

--- MAT BA135   (561350) ENDF ID (9685)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .3490E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .5814E+01 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .9304E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.5305E+02	.1001E+01	.6301E+00	.1833E+02	.1034E+01	.1113E+01	.3135E+02
20	.1128E+01	.1917E+01	.5487E+02	.1001E+01	.6164E+00	.1899E+02	.1049E+01	.1104E+01	.3245E+02
80	.1238E+01	.1899E+01	.6000E+02	.1001E+01	.5770E+00	.2084E+02	.1090E+01	.1073E+01	.3551E+02
140	.1339E+01	.1859E+01	.6469E+02	.1002E+01	.5393E+00	.2254E+02	.1128E+01	.1034E+01	.3835E+02
200	.1433E+01	.1799E+01	.6903E+02	.1002E+01	.5024E+00	.2412E+02	.1163E+01	.9888E+00	.4097E+02
260	.1521E+01	.1724E+01	.7310E+02	.1002E+01	.4660E+00	.2561E+02	.1197E+01	.9380E+00	.4342E+02
320	.1604E+01	.1637E+01	.7693E+02	.1002E+01	.4303E+00	.2701E+02	.1228E+01	.8831E+00	.4574E+02
380	.1683E+01	.1542E+01	.8057E+02	.1002E+01	.3956E+00	.2834E+02	.1257E+01	.8256E+00	.4793E+02
440	.1758E+01	.1441E+01	.8404E+02	.1002E+01	.3619E+00	.2962E+02	.1286E+01	.7665E+00	.5003E+02
520	.1853E+01	.1300E+01	.8843E+02	.1002E+01	.3187E+00	.3124E+02	.1321E+01	.6868E+00	.5269E+02
600	.1942E+01	.1157E+01	.9259E+02	.1002E+01	.2776E+00	.3277E+02	.1354E+01	.6073E+00	.5521E+02

--- MAT BA136   (561360) ENDF ID (9687)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .4785E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .4100E+00 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .5195E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1987E+02	.1001E+01	.6277E+00	.4640E+01	.1082E+01	.1818E+01	.1867E+02
20	.1128E+01	.1920E+01	.2050E+02	.1001E+01	.6139E+00	.4807E+01	.1118E+01	.1817E+01	.1927E+02
80	.1238E+01	.1902E+01	.2228E+02	.1001E+01	.5745E+00	.5277E+01	.1219E+01	.1797E+01	.2093E+02
140	.1339E+01	.1862E+01	.2388E+02	.1001E+01	.5367E+00	.5708E+01	.1313E+01	.1757E+01	.2245E+02
200	.1433E+01	.1802E+01	.2537E+02	.1001E+01	.4997E+00	.6108E+01	.1399E+01	.1699E+01	.2385E+02
260	.1521E+01	.1727E+01	.2674E+02	.1001E+01	.4634E+00	.6484E+01	.1480E+01	.1627E+01	.2515E+02
320	.1605E+01	.1640E+01	.2804E+02	.1001E+01	.4278E+00	.6839E+01	.1557E+01	.1545E+01	.2637E+02
380	.1684E+01	.1545E+01	.2926E+02	.1001E+01	.3931E+00	.7177E+01	.1630E+01	.1454E+01	.2752E+02
440	.1759E+01	.1443E+01	.3042E+02	.1001E+01	.3595E+00	.7499E+01	.1699E+01	.1358E+01	.2861E+02
520	.1854E+01	.1303E+01	.3188E+02	.1001E+01	.3165E+00	.7909E+01	.1787E+01	.1225E+01	.2999E+02
600	.1943E+01	.1159E+01	.3327E+02	.1000E+01	.2757E+00	.8299E+01	.1868E+01	.1089E+01	.3130E+02

--- MAT BA137   (561370) ENDF ID (9689)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .4544E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .5100E+01 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .9644E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2507E+02	.1001E+01	.6277E+00	.5629E+00	.1042E+01	.1237E+01	.1211E+02
20	.1128E+01	.1919E+01	.2590E+02	.1001E+01	.6139E+00	.5831E+00	.1061E+01	.1229E+01	.1251E+02
80	.1238E+01	.1902E+01	.2819E+02	.1001E+01	.5745E+00	.6400E+00	.1113E+01	.1200E+01	.1362E+02
140	.1339E+01	.1862E+01	.3029E+02	.1001E+01	.5367E+00	.6923E+00	.1160E+01	.1161E+01	.1464E+02
200	.1433E+01	.1802E+01	.3222E+02	.1001E+01	.4997E+00	.7409E+00	.1205E+01	.1113E+01	.1557E+02
260	.1521E+01	.1727E+01	.3402E+02	.1001E+01	.4634E+00	.7865E+00	.1246E+01	.1059E+01	.1644E+02
320	.1605E+01	.1640E+01	.3571E+02	.1001E+01	.4278E+00	.8296E+00	.1286E+01	.9990E+00	.1726E+02
380	.1684E+01	.1545E+01	.3731E+02	.1001E+01	.3931E+00	.8705E+00	.1323E+01	.9357E+00	.1804E+02
440	.1759E+01	.1443E+01	.3883E+02	.1001E+01	.3595E+00	.9097E+00	.1358E+01	.8702E+00	.1878E+02
520	.1854E+01	.1303E+01	.4076E+02	.1001E+01	.3165E+00	.9594E+00	.1403E+01	.7812E+00	.1971E+02
600	.1943E+01	.1159E+01	.4257E+02	.1000E+01	.2756E+00	.1007E+01	.1444E+01	.6918E+00	.2059E+02

--- MAT BA138   (561380) ENDF ID (1353)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .7000E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .3509E+00 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .7351E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1606E+02	.9994E+00	.6268E+00	.4804E+00	.1085E+01	.1858E+01	.1532E+02
20	.1128E+01	.1920E+01	.1656E+02	.9994E+00	.6131E+00	.4977E+00	.1122E+01	.1857E+01	.1579E+02
80	.1238E+01	.1902E+01	.1794E+02	.9995E+00	.5736E+00	.5461E+00	.1227E+01	.1838E+01	.1711E+02
140	.1339E+01	.1862E+01	.1920E+02	.9996E+00	.5359E+00	.5906E+00	.1323E+01	.1798E+01	.1831E+02
200	.1433E+01	.1802E+01	.2035E+02	.9996E+00	.4990E+00	.6320E+00	.1413E+01	.1740E+01	.1941E+02
260	.1521E+01	.1727E+01	.2142E+02	.9997E+00	.4627E+00	.6708E+00	.1497E+01	.1667E+01	.2043E+02
320	.1605E+01	.1640E+01	.2242E+02	.9997E+00	.4271E+00	.7075E+00	.1576E+01	.1582E+01	.2139E+02
380	.1684E+01	.1545E+01	.2337E+02	.9997E+00	.3925E+00	.7424E+00	.1651E+01	.1490E+01	.2229E+02
440	.1759E+01	.1444E+01	.2426E+02	.9996E+00	.3589E+00	.7758E+00	.1723E+01	.1392E+01	.2314E+02
520	.1854E+01	.1303E+01	.2539E+02	.9994E+00	.3160E+00	.8183E+00	.1813E+01	.1256E+01	.2422E+02
600	.1943E+01	.1159E+01	.2645E+02	.9989E+00	.2752E+00	.8588E+00	.1898E+01	.1117E+01	.2523E+02

--- MAT BA140   (561400) ENDF ID (9693)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .4930E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .1600E+01 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .6530E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1868E+02	.1000E+01	.6247E+00	.8188E+01	.1067E+01	.1603E+01	.1611E+02
20	.1128E+01	.1920E+01	.1928E+02	.1000E+01	.6110E+00	.8483E+01	.1097E+01	.1599E+01	.1663E+02
80	.1238E+01	.1902E+01	.2093E+02	.1000E+01	.5716E+00	.9311E+01	.1180E+01	.1576E+01	.1808E+02
140	.1339E+01	.1862E+01	.2243E+02	.9998E+00	.5339E+00	.1007E+02	.1256E+01	.1536E+01	.1940E+02
200	.1433E+01	.1802E+01	.2380E+02	.9996E+00	.4970E+00	.1078E+02	.1327E+01	.1482E+01	.2061E+02
260	.1521E+01	.1727E+01	.2509E+02	.9994E+00	.4608E+00	.1144E+02	.1394E+01	.1417E+01	.2174E+02
320	.1605E+01	.1640E+01	.2629E+02	.9992E+00	.4253E+00	.1207E+02	.1456E+01	.1343E+01	.2281E+02
380	.1684E+01	.1545E+01	.2743E+02	.9990E+00	.3908E+00	.1267E+02	.1516E+01	.1262E+01	.2381E+02
440	.1759E+01	.1444E+01	.2850E+02	.9988E+00	.3574E+00	.1324E+02	.1573E+01	.1177E+01	.2476E+02
520	.1854E+01	.1303E+01	.2986E+02	.9984E+00	.3146E+00	.1396E+02	.1644E+01	.1061E+01	.2597E+02
600	.1943E+01	.1159E+01	.3114E+02	.9977E+00	.2739E+00	.1465E+02	.1711E+01	.9422E+00	.2710E+02

--- MAT BE9   (40090) ENDF ID (1304)
REACTION TYPE 2 IS SCATTER, SIGMA ZERO .6000E+01 BARNS
REACTION TYPE 102 IS N-GAMMA, SIGMA ZERO .9500E-02 BARNS
REACTION TYPE 1 IS TOTAL, SIGMA ZERO .6010E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1564E+02	.1002E+01	.6276E+00	.7455E-01	.1089E+01	.1918E+01	.1561E+02
20	.1128E+01	.1920E+01	.1612E+02	.1002E+01	.6139E+00	.7728E-01	.1128E+01	.1917E+01	.1610E+02
80	.1238E+01	.1902E+01	.1746E+02	.1002E+01	.5744E+00	.8498E-01	.1238E+01	.1900E+01	.1744E+02
140	.1339E+01	.1862E+01	.1868E+02	.1002E+01	.5366E+00	.9202E-01	.1339E+01	.1860E+01	.1865E+02
200	.1433E+01	.1802E+01	.1980E+02	.1002E+01	.4997E+00	.9859E-01	.1433E+01	.1800E+01	.1977E+02
260	.1521E+01	.1727E+01	.2083E+02	.1002E+01	.4633E+00	.1047E+00	.1521E+01	.1725E+01	.2080E+02
320	.1605E+01	.1640E+01	.2180E+02	.1002E+01	.4277E+00	.1105E+00	.1604E+01	.1638E+01	.2177E+02
380	.1684E+01	.1545E+01	.2272E+02	.1002E+01	.3931E+00	.1160E+00	.1683E+01	.1543E+01	.2268E+02
440	.1759E+01	.1444E+01	.2358E+02	.1001E+01	.3594E+00	.1213E+00	.1758E+01	.1442E+01	.2355E+02
520	.1854E+01	.1303E+01	.2467E+02	.1001E+01	.3164E+00	.1281E+00	.1852E+01	.1301E+01	.2463E+02
600	.1943E+01	.1159E+01	.2570E+02	.1001E+01	.2756E+00	.1348E+00	.1941E+01	.1158E+01	.2566E+02

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--- MAT BR79   (350790) ENDF ID (9113)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2362E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1110E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1346E+02 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.5987E+02	.1001E+01	.6318E+00	.1289E+02	.1017E+01	.8572E+00	.2113E+02
20	.1128E+01	.1917E+01	.6195E+02	.1002E+01	.6181E+00	.1335E+02	.1024E+01	.8459E+00	.2188E+02
80	.1238E+01	.1898E+01	.6777E+02	.1002E+01	.5789E+00	.1466E+02	.1043E+01	.8103E+00	.2397E+02
140	.1339E+01	.1858E+01	.7309E+02	.1002E+01	.5412E+00	.1585E+02	.1061E+01	.7722E+00	.2589E+02
200	.1433E+01	.1799E+01	.7802E+02	.1002E+01	.5042E+00	.1696E+02	.1078E+01	.7313E+00	.2767E+02
260	.1521E+01	.1724E+01	.8264E+02	.1002E+01	.4679E+00	.1801E+02	.1093E+01	.6882E+00	.2935E+02
320	.1604E+01	.1637E+01	.8700E+02	.1003E+01	.4322E+00	.1899E+02	.1108E+01	.6435E+00	.3092E+02
380	.1683E+01	.1541E+01	.9113E+02	.1003E+01	.3974E+00	.1993E+02	.1122E+01	.5980E+00	.3242E+02
440	.1758E+01	.1440E+01	.9507E+02	.1003E+01	.3636E+00	.2083E+02	.1135E+01	.5524E+00	.3385E+02
520	.1853E+01	.1300E+01	.1001E+03	.1003E+01	.3202E+00	.2196E+02	.1152E+01	.4920E+00	.3566E+02
600	.1941E+01	.1156E+01	.1048E+03	.1003E+01	.2790E+00	.2304E+02	.1167E+01	.4329E+00	.3739E+02

--- MAT BR81   (350810) ENDF ID (9117)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2843E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2690E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5533E+01 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.5379E+02	.1001E+01	.6295E+00	.1980E+02	.1046E+01	.1292E+01	.3726E+02
20	.1128E+01	.1919E+01	.5564E+02	.1001E+01	.6158E+00	.2051E+02	.1066E+01	.1285E+01	.3856E+02
80	.1238E+01	.1901E+01	.6084E+02	.1001E+01	.5765E+00	.2252E+02	.1123E+01	.1257E+01	.4221E+02
140	.1339E+01	.1861E+01	.6560E+02	.1002E+01	.5387E+00	.2435E+02	.1175E+01	.1218E+01	.4555E+02
200	.1433E+01	.1801E+01	.7001E+02	.1002E+01	.5018E+00	.2606E+02	.1223E+01	.1169E+01	.4861E+02
260	.1521E+01	.1726E+01	.7414E+02	.1002E+01	.4654E+00	.2767E+02	.1269E+01	.1113E+01	.5154E+02
320	.1604E+01	.1639E+01	.7803E+02	.1002E+01	.4298E+00	.2918E+02	.1311E+01	.1051E+01	.5428E+02
380	.1683E+01	.1544E+01	.8172E+02	.1002E+01	.3950E+00	.3062E+02	.1352E+01	.9852E+00	.5687E+02
440	.1759E+01	.1442E+01	.8523E+02	.1002E+01	.3613E+00	.3200E+02	.1391E+01	.9168E+00	.5935E+02
520	.1853E+01	.1302E+01	.8969E+02	.1002E+01	.3182E+00	.3375E+02	.1439E+01	.8236E+00	.6249E+02
600	.1942E+01	.1158E+01	.9392E+02	.1001E+01	.2772E+00	.3541E+02	.1485E+01	.7298E+00	.6547E+02

--- MAT B10   (50100) ENDF ID (1305)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2034E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5000E+00 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .5660E-03 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1807E+02	.1001E+01	.6259E+00	-.5172E-02	.1001E+01	.6275E+00	.2898E+00
20	.1128E+01	.1919E+01	.1864E+02	.1001E+01	.6121E+00	-.5222E-02	.1001E+01	.6138E+00	.3003E+00
80	.1238E+01	.1901E+01	.2023E+02	.1001E+01	.5727E+00	-.5337E-02	.1001E+01	.5744E+00	.3297E+00
140	.1339E+01	.1861E+01	.2168E+02	.1000E+01	.5349E+00	-.5431E-02	.1001E+01	.5366E+00	.3566E+00
200	.1433E+01	.1802E+01	.2300E+02	.1000E+01	.4980E+00	-.5520E-02	.1001E+01	.4996E+00	.3817E+00
260	.1521E+01	.1727E+01	.2424E+02	.1000E+01	.4618E+00	-.5604E-02	.1001E+01	.4633E+00	.4052E+00
320	.1605E+01	.1640E+01	.2539E+02	.1000E+01	.4263E+00	-.5658E-02	.1001E+01	.4277E+00	.4274E+00
380	.1684E+01	.1545E+01	.2648E+02	.9999E+00	.3917E+00	-.5758E-02	.1001E+01	.3930E+00	.4485E+00
440	.1759E+01	.1443E+01	.2752E+02	.9997E+00	.3582E+00	-.5787E-02	.1001E+01	.3594E+00	.4687E+00
520	.1854E+01	.1303E+01	.2882E+02	.9993E+00	.3153E+00	-.5729E-02	.1001E+01	.3164E+00	.4944E+00
600	.1943E+01	.1159E+01	.3005E+02	.9988E+00	.2746E+00	-.5489E-02	.1000E+01	.2756E+00	.5190E+00

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NEUTRON TEMP(C)	REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .3837E+04 BARNS			REACTION TYPE 113 IS (N,2T+ALPHA) SIGMA ZERO .5660E-03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3839E+04 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1001E+01	.6275E+00	-.1884E-02	.1001E+01	.6275E+00	.2898E+00	.1001E+01	.6282E+00	.7694E-02
20	.1001E+01	.6138E+00	-.1951E-02	.1001E+01	.6138E+00	.3003E+00	.1001E+01	.6144E+00	.7929E-02
80	.1001E+01	.5743E+00	-.2059E-02	.1001E+01	.5744E+00	.3297E+00	.1001E+01	.5750E+00	.8664E-02
140	.1001E+01	.5365E+00	-.2186E-02	.1001E+01	.5366E+00	.3566E+00	.1001E+01	.5372E+00	.9301E-02
200	.1001E+01	.4995E+00	-.2305E-02	.1001E+01	.4996E+00	.3817E+00	.1001E+01	.5002E+00	.9885E-02
260	.1001E+01	.4633E+00	-.2377E-02	.1001E+01	.4633E+00	.4052E+00	.1001E+01	.4639E+00	.1047E-01
320	.1001E+01	.4277E+00	-.2509E-02	.1001E+01	.4277E+00	.4274E+00	.1001E+01	.4283E+00	.1095E-01
380	.1001E+01	.3930E+00	-.2634E-02	.1001E+01	.3930E+00	.4485E+00	.1001E+01	.3936E+00	.1140E-01
440	.1001E+01	.3594E+00	-.2715E-02	.1001E+01	.3594E+00	.4687E+00	.1001E+01	.3600E+00	.1187E-01
520	.1001E+01	.3164E+00	-.2713E-02	.1001E+01	.3164E+00	.4944E+00	.1001E+01	.3169E+00	.1256E-01
600	.1000E+01	.2755E+00	-.2538E-02	.1000E+01	.2756E+00	.5190E+00	.1001E+01	.2760E+00	.1339E-01

NEUTRON TEMP(C)	REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .3837E+04 BARNS		
	G	GE	S
0	.1001E+01	.6275E+00	-.1884E-02
20	.1001E+01	.6138E+00	-.1951E-02
80	.1001E+01	.5743E+00	-.2059E-02
140	.1001E+01	.5365E+00	-.2186E-02
200	.1001E+01	.4995E+00	-.2305E-02
260	.1001E+01	.4633E+00	-.2377E-02
320	.1001E+01	.4277E+00	-.2509E-02
380	.1001E+01	.3930E+00	-.2635E-02
440	.1001E+01	.3594E+00	-.2716E-02
520	.1001E+01	.3164E+00	-.2713E-02
600	.1000E+01	.2755E+00	-.2538E-02

--- MAT B11   (50110) ENDF ID (1160)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5036E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5000E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5041E+01 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1576E+02	.1002E+01	.6286E+00	.6230E-01	.1089E+01	.1919E+01	.1575E+02
20	.1128E+01	.1920E+01	.1625E+02	.1002E+01	.6148E+00	.6450E-01	.1128E+01	.1918E+01	.1623E+02
80	.1238E+01	.1902E+01	.1761E+02	.1002E+01	.5754E+00	.7065E-01	.1238E+01	.1900E+01	.1759E+02
140	.1339E+01	.1862E+01	.1883E+02	.1002E+01	.5375E+00	.7628E-01	.1339E+01	.1860E+01	.1881E+02
200	.1433E+01	.1802E+01	.1996E+02	.1002E+01	.5005E+00	.8148E-01	.1433E+01	.1801E+01	.1994E+02
260	.1521E+01	.1727E+01	.2101E+02	.1002E+01	.4641E+00	.8636E-01	.1521E+01	.1726E+01	.2099E+02
320	.1605E+01	.1640E+01	.2199E+02	.1002E+01	.4284E+00	.9094E-01	.1604E+01	.1639E+01	.2196E+02
380	.1684E+01	.1545E+01	.2291E+02	.1002E+01	.3937E+00	.9533E-01	.1683E+01	.1544E+01	.2289E+02
440	.1759E+01	.1444E+01	.2378E+02	.1002E+01	.3600E+00	.9954E-01	.1758E+01	.1442E+01	.2376E+02
520	.1854E+01	.1303E+01	.2488E+02	.1002E+01	.3170E+00	.1050E+00	.1853E+01	.1302E+01	.2486E+02
600	.1943E+01	.1159E+01	.2592E+02	.1001E+01	.2760E+00	.1104E+00	.1942E+01	.1158E+01	.2590E+02

--- MAT CD106   (481060)   ENDF ID (9440)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .5523E+01 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .1100E+01 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .6623E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2181E+02	.7141E+01	.1486E+01	.7917E+01	.2094E+01	.1848E+01	.1951E+02
20	.1128E+01	.1920E+01	.2252E+02	.6745E+01	.1472E+01	.8889E+01	.2061E+01	.1845E+01	.2025E+02
80	.1238E+01	.1902E+01	.2449E+02	.5806E+01	.1417E+01	.1141E+02	.1997E+01	.1821E+01	.2231E+02
140	.1339E+01	.1862E+01	.2627E+02	.5132E+01	.1350E+01	.1348E+02	.1969E+01	.1777E+01	.2415E+02
200	.1433E+01	.1802E+01	.2792E+02	.4635E+01	.1275E+01	.1525E+02	.1965E+01	.1715E+01	.2582E+02
260	.1521E+01	.1727E+01	.2946E+02	.4259E+01	.1194E+01	.1679E+02	.1976E+01	.1639E+01	.2736E+02
320	.1605E+01	.1640E+01	.3090E+02	.3969E+01	.1109E+01	.1816E+02	.1997E+01	.1552E+01	.2879E+02
380	.1684E+01	.1545E+01	.3227E+02	.3742E+01	.1023E+01	.1940E+02	.2025E+01	.1458E+01	.3013E+02
440	.1759E+01	.1444E+01	.3356E+02	.3560E+01	.9379E+00	.2054E+02	.2058E+01	.1360E+01	.3140E+02
520	.1854E+01	.1303E+01	.3520E+02	.3371E+01	.8263E+00	.2193E+02	.2106E+01	.1224E+01	.3299E+02
600	.1943E+01	.1159E+01	.3674E+02	.3226E+01	.7188E+00	.2321E+02	.2156E+01	.1086E+01	.3449E+02

--- MAT CD110   (481100)   ENDF ID (9444)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .3211E+01 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .1110E+02 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .1431E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.4078E+02	.1001E+01	.6279E+00	.3677E+01	.1021E+01	.9175E+00	.1200E+02
20	.1128E+01	.1919E+01	.4217E+02	.1001E+01	.6142E+00	.3805E+01	.1030E+01	.9068E+00	.1242E+02
80	.1238E+01	.1901E+01	.4606E+02	.1001E+01	.5747E+00	.4181E+01	.1054E+01	.8722E+00	.1358E+02
140	.1339E+01	.1860E+01	.4961E+02	.1001E+01	.5369E+00	.4523E+01	.1077E+01	.8338E+00	.1464E+02
200	.1433E+01	.1801E+01	.5289E+02	.1001E+01	.5000E+00	.4840E+01	.1098E+01	.7919E+00	.1562E+02
260	.1521E+01	.1726E+01	.5597E+02	.1001E+01	.4636E+00	.5138E+01	.1118E+01	.7468E+00	.1654E+02
320	.1604E+01	.1639E+01	.5886E+02	.1001E+01	.4280E+00	.5419E+01	.1137E+01	.6997E+00	.1741E+02
380	.1683E+01	.1544E+01	.6160E+02	.1001E+01	.3934E+00	.5687E+01	.1154E+01	.6514E+00	.1823E+02
440	.1759E+01	.1442E+01	.6422E+02	.1001E+01	.3597E+00	.5942E+01	.1171E+01	.6026E+00	.1902E+02
520	.1853E+01	.1302E+01	.6753E+02	.1001E+01	.3167E+00	.6267E+01	.1192E+01	.5377E+00	.2001E+02
600	.1942E+01	.1158E+01	.7066E+02	.1000E+01	.2758E+00	.6576E+01	.1212E+01	.4738E+00	.2095E+02

--- MAT CD111   (481110)   ENDF ID (9445)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .3682E+01 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .2430E+02 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .2798E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.2511E+02	.1001E+01	.6278E+00	.1951E+01	.1013E+01	.7978E+00	.4998E+01
20	.1128E+01	.1919E+01	.2593E+02	.1001E+01	.6141E+00	.2022E+01	.1018E+01	.7858E+00	.5168E+01
80	.1238E+01	.1901E+01	.2823E+02	.1001E+01	.5747E+00	.2219E+01	.1032E+01	.7492E+00	.5642E+01
140	.1339E+01	.1861E+01	.3033E+02	.1001E+01	.5369E+00	.2400E+01	.1046E+01	.7111E+00	.6075E+01
200	.1433E+01	.1801E+01	.3226E+02	.1001E+01	.4999E+00	.2569E+01	.1058E+01	.6712E+00	.6476E+01
260	.1521E+01	.1726E+01	.3407E+02	.1001E+01	.4636E+00	.2727E+01	.1070E+01	.6297E+00	.6850E+01
320	.1605E+01	.1639E+01	.3576E+02	.1001E+01	.4280E+00	.2876E+01	.1081E+01	.5874E+00	.7203E+01
380	.1684E+01	.1544E+01	.3736E+02	.1001E+01	.3933E+00	.3018E+01	.1091E+01	.5447E+00	.7537E+01
440	.1759E+01	.1443E+01	.3889E+02	.1001E+01	.3597E+00	.3153E+01	.1101E+01	.5022E+00	.7855E+01
520	.1854E+01	.1302E+01	.4081E+02	.1001E+01	.3167E+00	.3326E+01	.1113E+01	.4463E+00	.8258E+01
600	.1942E+01	.1158E+01	.4264E+02	.1000E+01	.2758E+00	.3490E+01	.1124E+01	.3919E+00	.8641E+01

--- MAT CD112   (481120)   ENDF ID (9447)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .3729E+01 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .2200E+01 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .5929E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2444E+02	.1001E+01	.6278E+00	.6262E+01	.1056E+01	.1440E+01	.1769E+02
20	.1128E+01	.1919E+01	.2524E+02	.1001E+01	.6141E+00	.6487E+01	.1081E+01	.1435E+01	.1828E+02
80	.1238E+01	.1901E+01	.2747E+02	.1001E+01	.5746E+00	.7120E+01	.1150E+01	.1409E+01	.1992E+02
140	.1339E+01	.1861E+01	.2950E+02	.1001E+01	.5368E+00	.7702E+01	.1214E+01	.1370E+01	.2141E+02
200	.1433E+01	.1802E+01	.3138E+02	.1001E+01	.4999E+00	.8242E+01	.1273E+01	.1319E+01	.2279E+02
260	.1521E+01	.1727E+01	.3313E+02	.1001E+01	.4635E+00	.8749E+01	.1328E+01	.1258E+01	.2408E+02
320	.1605E+01	.1640E+01	.3477E+02	.1001E+01	.4280E+00	.9229E+01	.1381E+01	.1190E+01	.2529E+02
380	.1684E+01	.1545E+01	.3632E+02	.1001E+01	.3933E+00	.9684E+01	.1430E+01	.1117E+01	.2644E+02
440	.1759E+01	.1443E+01	.3780E+02	.1001E+01	.3597E+00	.1012E+02	.1478E+01	.1041E+01	.2753E+02
520	.1854E+01	.1303E+01	.3967E+02	.1001E+01	.3166E+00	.1067E+02	.1537E+01	.9368E+00	.2891E+02
600	.1943E+01	.1159E+01	.4143E+02	.1000E+01	.2758E+00	.1120E+02	.1593E+01	.8312E+00	.3021E+02

--- MAT CD113   (481130)   ENDF ID (1318)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .2170E+02 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .1989E+05 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .1991E+05 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.2045E+01	.1308E+02	.1814E+02	.1267E+01	.2342E+01	.1276E+01	.1268E+01	.2354E+01	.1295E+01
20	.2323E+01	.1298E+02	.1788E+02	.1332E+01	.2260E+01	.1104E+01	.1333E+01	.2271E+01	.1122E+01
80	.3288E+01	.1204E+02	.1616E+02	.1541E+01	.1922E+01	.4614E+00	.1543E+01	.1933E+01	.4785E+00
140	.4396E+01	.1045E+02	.1348E+02	.1764E+01	.1525E+01	-.2666E+01	.1767E+01	.1534E+01	-.2516E+00
200	.5574E+01	.8668E+01	.1047E+02	.1984E+01	.1151E+01	-.9635E+00	.1988E+01	.1159E+01	-.9511E+00
260	.6755E+01	.7032E+01	.7601E+01	.2190E+01	.8467E+00	-.1563E+01	.2195E+01	.8535E+00	-.1553E+01
320	.7891E+01	.5672E+01	.5090E+01	.2377E+01	.6187E+00	-.2049E+01	.2383E+01	.6242E+00	-.2041E+01
380	.8951E+01	.4594E+01	.2984E+01	.2539E+01	.4545E+00	-.2432E+01	.2546E+01	.4591E+00	-.2426E+01
440	.9919E+01	.3753E+01	.1247E+01	.2678E+01	.3379E+00	-.2731E+01	.2686E+01	.3416E+00	-.2727E+01
520	.1105E+02	.2906E+01	-.5639E+00	.2827E+01	.2325E+00	-.3028E+01	.2836E+01	.2355E+00	-.3026E+01
600	.1201E+02	.2281E+01	-.1972E+01	.2938E+01	.1640E+00	-.3238E+01	.2947E+01	.1663E+00	-.3237E+01

--- MAT CD114   (481140)   ENDF ID (9450)

REACTION TYPE 2 IS SCATTER   SIGMA ZERO .3385E+01 BARNS
REACTION TYPE 102 IS N-GAMMA   SIGMA ZERO .3360E+00 BARNS
REACTION TYPE 1 IS TOTAL   SIGMA ZERO .3721E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3250E+02	.1001E+01	.6151E+00	.6134E+01	.1081E+01	.1803E+01	.3511E+02
20	.1128E+01	.1919E+01	.3359E+02	.1001E+01	.6151E+00	.6355E+02	.1117E+01	.1801E+01	.3630E+02
80	.1238E+01	.1901E+01	.3664E+02	.1001E+01	.5757E+00	.6975E+02	.1217E+01	.1782E+01	.3963E+02
140	.1339E+01	.1861E+01	.3942E+02	.1001E+01	.5379E+00	.7545E+02	.1309E+01	.1742E+01	.4267E+02
200	.1433E+01	.1802E+01	.4199E+02	.1001E+01	.5010E+00	.8074E+02	.1394E+01	.1684E+01	.4549E+02
260	.1521E+01	.1727E+01	.4439E+02	.1001E+01	.4647E+00	.8571E+02	.1474E+01	.1613E+01	.4813E+02
320	.1605E+01	.1640E+01	.4666E+02	.1002E+01	.4290E+00	.9040E+02	.1550E+01	.1530E+01	.5061E+02
380	.1684E+01	.1544E+01	.4880E+02	.1002E+01	.3943E+00	.9487E+02	.1622E+01	.1440E+01	.5296E+02
440	.1759E+01	.1443E+01	.5083E+02	.1002E+01	.3607E+00	.9913E+02	.1690E+01	.1345E+01	.5520E+02
520	.1854E+01	.1302E+01	.5341E+02	.1001E+01	.3176E+00	.1045E+03	.1777E+01	.1214E+01	.5803E+02
600	.1943E+01	.1159E+01	.5585E+02	.1001E+01	.2766E+00	.1097E+03	.1858E+01	.1079E+01	.6072E+02

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--- MAT CD115M   (481151) ENDF ID (9452)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4324E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3100E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3532E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2201E+02	.1001E+01	.6277E+00	.6399E+01	.1012E+01	.7859E+00	.8311E+01
20	.1128E+01	.1920E+01	.2273E+02	.1001E+01	.6139E+00	.6630E+01	.1017E+01	.7738E+00	.8600E+01
80	.1238E+01	.1902E+01	.2472E+02	.1001E+01	.5745E+00	.7277E+01	.1030E+01	.7369E+00	.9411E+01
140	.1339E+01	.1862E+01	.2652E+02	.1001E+01	.5367E+00	.7871E+01	.1043E+01	.6989E+00	.1015E+02
200	.1433E+01	.1802E+01	.2819E+02	.1001E+01	.4997E+00	.8423E+01	.1054E+01	.6592E+00	.1084E+02
260	.1521E+01	.1727E+01	.2974E+02	.1001E+01	.4634E+00	.8942E+01	.1065E+01	.6181E+00	.1149E+02
320	.1605E+01	.1640E+01	.3120E+02	.1001E+01	.4278E+00	.9432E+01	.1075E+01	.5762E+00	.1210E+02
380	.1684E+01	.1545E+01	.3258E+02	.1001E+01	.3931E+00	.9897E+01	.1085E+01	.5341E+00	.1267E+02
440	.1759E+01	.1444E+01	.3389E+02	.1001E+01	.3595E+00	.1034E+02	.1094E+01	.4922E+00	.1322E+02
520	.1854E+01	.1303E+01	.3554E+02	.1001E+01	.3165E+00	.1091E+02	.1105E+01	.4372E+00	.1392E+02
600	.1943E+01	.1159E+01	.3710E+02	.1000E+01	.2756E+00	.1144E+02	.1116E+01	.3838E+00	.1458E+02

--- MAT CD116   (481160) ENDF ID (9453)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4231E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7685E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4307E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2035E+02	.1001E+01	.6280E+00	.3291E+02	.1087E+01	.1897E+01	.2058E+02
20	.1128E+01	.1920E+01	.2101E+02	.1001E+01	.6143E+00	.3410E+02	.1126E+01	.1896E+01	.2124E+02
80	.1238E+01	.1902E+01	.2283E+02	.1001E+01	.5749E+00	.3742E+02	.1234E+01	.1878E+01	.2309E+02
140	.1339E+01	.1862E+01	.2448E+02	.1001E+01	.5371E+00	.4048E+02	.1333E+01	.1838E+01	.2477E+02
200	.1433E+01	.1802E+01	.2600E+02	.1001E+01	.5001E+00	.4332E+02	.1426E+01	.1779E+01	.2631E+02
260	.1521E+01	.1727E+01	.2742E+02	.1001E+01	.4638E+00	.4599E+02	.1512E+01	.1705E+01	.2775E+02
320	.1605E+01	.1640E+01	.2875E+02	.1001E+01	.4282E+00	.4850E+02	.1594E+01	.1619E+01	.2911E+02
380	.1684E+01	.1545E+01	.3001E+02	.1001E+01	.3935E+00	.5090E+02	.1672E+01	.1524E+01	.3038E+02
440	.1759E+01	.1443E+01	.3120E+02	.1001E+01	.3599E+00	.5319E+02	.1745E+01	.1424E+01	.3160E+02
520	.1854E+01	.1303E+01	.3271E+02	.1001E+01	.3168E+00	.5609E+02	.1839E+01	.1285E+01	.3313E+02
600	.1943E+01	.1159E+01	.3413E+02	.1001E+01	.2759E+00	.5885E+02	.1926E+01	.1143E+01	.3457E+02

--- MAT CE140   (581400) ENDF ID (9724)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4930E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5700E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5500E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2116E+02	.1001E+01	.6276E+00	.3008E+00	.1080E+01	.1786E+01	.1900E+02
20	.1128E+01	.1920E+01	.2184E+02	.1001E+01	.6139E+00	.3117E+00	.1115E+01	.1784E+01	.1961E+02
80	.1238E+01	.1902E+01	.2374E+02	.1001E+01	.5745E+00	.3421E+00	.1214E+01	.1764E+01	.2132E+02
140	.1339E+01	.1862E+01	.2547E+02	.1001E+01	.5367E+00	.3701E+00	.1304E+01	.1724E+01	.2287E+02
200	.1433E+01	.1802E+01	.2706E+02	.1001E-01	.4997E+00	.3961E+00	.1389E+01	.1667E+01	.2430E+02
260	.1521E+01	.1727E+01	.2855E+02	.1001E+01	.4634E+00	.4204E+00	.1468E+01	.1596E+01	.2563E+02
320	.1605E+01	.1640E+01	.2994E+02	.1001E+01	.4278E+00	.4435E+00	.1542E+01	.1515E+01	.2688E+02
380	.1684E+01	.1545E+01	.3126E+02	.1001E+01	.3931E+00	.4654E+00	.1613E+01	.1425E+01	.2806E+02
440	.1759E+01	.1444E+01	.3250E+02	.1001E+01	.3595E+00	.4863E+00	.1680E+01	.1331E+01	.2919E+02
520	.1854E+01	.1303E+01	.3408E+02	.1001E+01	.3165E+00	.5130E+00	.1765E+01	.1201E+01	.3060E+02
600	.1943E+01	.1159E+01	.3557E+02	.1000E+01	.2756E+00	.5385E+00	.1845E+01	.1068E+01	.3194E+02

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--- MAT CE141   (581410) ENDF ID (9725)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4953E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2900E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3395E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5945E+02	.1001E+01	.6277E+00	.4113E+00	.1014E+01	.8162E+00	.9024E+01
20	.1128E+01	.1920E+01	.6151E+02	.1001E+01	.6139E+00	.4261E+00	.1020E+01	.8044E+00	.9337E+01
80	.1238E+01	.1902E+01	.6728E+02	.1001E+01	.5745E+00	.4677E+00	.1036E+01	.7681E+00	.1021E+02
140	.1339E+01	.1862E+01	.7257E+02	.1001E+01	.5367E+00	.5059E+00	.1051E+01	.7300E+00	.1102E+02
200	.1433E+01	.1802E+01	.7746E+02	.1001E+01	.4997E+00	.5414E+00	.1064E+01	.6897E+00	.1176E+02
260	.1521E+01	.1727E+01	.8205E+02	.1001E+01	.4634E+00	.5747E+00	.1077E+03	.6478E+00	.1246E+02
320	.1605E+01	.1640E+01	.8637E+02	.1001E+01	.4278E+00	.6062E+00	.1089E+01	.6047E+00	.1312E+02
380	.1684E+01	.1545E+01	.9047E+02	.1001E+01	.3931E+00	.6361E+00	.1101E+01	.5611E+00	.1374E+02
440	.1759E+01	.1444E+01	.9438E+02	.1001E+01	.3595E+00	.6647E+00	.1112E+01	.5176E+00	.1434E+02
520	.1854E+01	.1303E+01	.9934E+02	.1001E+01	.3165E+00	.7011E+00	.1125E+01	.4604E+00	.1509E+02
600	.1943E+01	.1159E+01	.1040E+03	.1000E+01	.2756E+00	.7359E+00	.1138E+01	.4045E+00	.1581E+02

--- MAT CE142   (581420) ENDF ID (9726)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4977E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9500E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5927E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2670E+02	.1001E+01	.6277E+00	.4299E+00	.1075E+01	.1713E+01	.2249E+02
20	.1128E+01	.1920E+01	.2758E+02	.1001E+01	.6139E+00	.4454E+00	.1108E+01	.1710E+01	.2323E+02
80	.1238E+01	.1902E+01	.3004E+02	.1001E+01	.5745E+00	.4889E+00	.1200E+01	.1689E+01	.2530E+02
140	.1339E+01	.1862E+01	.3228E+02	.1001E+01	.5367E+00	.5289E+00	.1285E+01	.1649E+01	.2719E+02
200	.1433E+01	.1802E+01	.3435E+02	.1001E+01	.4997E+00	.5660E+00	.1364E+01	.1594E+01	.2894E+02
260	.1521E+01	.1727E+01	.3629E+02	.1001E+01	.4634E+00	.6008E+00	.1438E+01	.1525E+01	.3057E+02
320	.1605E+01	.1640E+01	.3810E+02	.1001E+01	.4278E+00	.6337E+00	.1508E+01	.1446E+01	.3210E+02
380	.1684E+01	.1545E+01	.3982E+02	.1001E+01	.3931E+00	.6650E+00	.1574E+01	.1360E+01	.3355E+02
440	.1759E+01	.1444E+01	.4146E+02	.1001E+01	.3595E+00	.6949E+00	.1638E+01	.1270E+01	.3492E+02
520	.1854E+01	.1303E+01	.4352E+02	.1001E+01	.3165E+00	.7330E+00	.1717E+01	.1145E+01	.3666E+02
600	.1943E+01	.1159E+01	.4548E+02	.1000E+01	.2756E+00	.7693E+00	.1792E+01	.1017E+01	.3831E+02

--- MAT CE143   (581430) ENDF ID (9727)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5000E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6000E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1100E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5406E+02	.1001E+01	.6277E+00	.7044E+01	.1041E+01	.1215E+01	.2842E+02
20	.1128E+01	.1920E+01	.5593E+02	.1001E+01	.6139E+00	.7297E+01	.1059E+01	.1207E+01	.2940E+02
80	.1238E+01	.1902E+01	.6116E+02	.1001E+01	.5745E+00	.8009E+01	.1109E+01	.1178E+01	.3217E+02
140	.1339E+01	.1862E+01	.6594E+02	.1001E+01	.5367E+00	.8663E+01	.1155E+01	.1139E+01	.3470E+02
200	.1433E+01	.1802E+01	.7038E+02	.1001E+01	.4997E+00	.9271E+01	.1198E+01	.1092E+01	.3705E+02
260	.1521E+01	.1727E+01	.7452E+02	.1001E+01	.4634E+00	.9842E+01	.1238E+01	.1038E+01	.3924E+02
320	.1605E+01	.1640E+01	.7844E+02	.1001E+01	.4278E+00	.1038E+02	.1276E+01	.9789E+00	.4132E+02
380	.1684E+01	.1545E+01	.8215E+02	.1001E+01	.3931E+00	.1089E+02	.1311E+01	.9166E+00	.4328E+02
440	.1759E+01	.1444E+01	.8568E+02	.1001E+01	.3595E+00	.1138E+02	.1346E+01	.8522E+00	.4516E+02
520	.1854E+01	.1303E+01	.9016E+02	.1001E+01	.3165E+00	.1200E+02	.1389E+01	.7648E+00	.4753E+02
600	.1943E+01	.1159E+01	.9442E+02	.1000E+01	.2756E+00	.1260E+02	.1429E+01	.6772E+00	.4979E+02

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--- MAT CE144    (581440)  ENDF ID ( 9728)
                 REACTION TYPE   2 IS SCATTER      REACTION TYPE 102 IS N-GAMMA     REACTION TYPE   1 IS TOTAL
                 SIGMA ZERO  .5024E+01 BARNS       SIGMA ZERO  .1000E+01 BARNS      SIGMA ZERO  .6024E+01 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S          G          GE         S

        0      .1089E+01  .1920E+01  .2509E+02   .1001E+01  .6274E+00  .1737E+01  .1074E+01  .1705E+01  .2121E+02
       20      .1128E+01  .1920E+01  .2591E+02   .1001E+01  .6137E+00  .1800E+01  .1107E+01  .1703E+01  .2191E+02
       80      .1238E+01  .1902E+01  .2821E+02   .1001E+01  .5742E+00  .1975E+01  .1199E+01  .1681E+01  .2386E+02
      140      .1339E+01  .1862E+01  .3031E+02   .1001E+01  .5364E+00  .2137E+01  .1283E+01  .1642E+01  .2563E+02
      200      .1433E+01  .1802E+01  .3224E+02   .1001E+01  .4995E+00  .2287E+01  .1362E+01  .1586E+01  .2727E+02
      260      .1521E+01  .1727E+01  .3604E+02   .1001E+01  .4632E+00  .2428E+01  .1435E+01  .1517E+01  .2879E+02
      320      .1605E+01  .1640E+01  .3573E+02   .1001E+01  .4276E+00  .2561E+01  .1505E+01  .1439E+01  .3023E+02
      380      .1684E+01  .1545E+01  .3734E+02   .1001E+01  .3929E+00  .2687E+01  .1570E+01  .1354E+01  .3158E+02
      440      .1759E+01  .1444E+01  .3886E+02   .1001E+01  .3593E+00  .2808E+01  .1633E+01  .1264E+01  .3287E+02
      520      .1854E+01  .1303E+01  .4078E+02   .1001E+01  .3163E+00  .2961E+01  .1712E+01  .1139E+01  .3450E+02
      600      .1943E+01  .1159E+01  .4260E+02   .1000E+01  .2755E+00  .3107E+01  .1786E+01  .1012E+01  .3605E+02


--- MAT CL-NAT   (170000)  ENDF ID ( 1149)
                 REACTION TYPE   2 IS SCATTER      REACTION TYPE 102 IS N-GAMMA     REACTION TYPE 103 IS (N,P)
                 SIGMA ZERO  .1650E+02 BARNS       SIGMA ZERO  .3285E+02 BARNS      SIGMA ZERO  .3550E+00 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S          G          GE         S

        0      .1087E+01  .1870E+01  .7171E+01   .1015E+01  .6381E+00  -.3795E-01  .1001E+01  .6277E+00  .1847E+00
       20      .1126E+01  .1868E+01  .7350E+01   .1014E+01  .6248E+00  -.3759E-01  .1001E+01  .6139E+00  .1913E+00
       80      .1234E+01  .1847E+01  .7841E+01   .1012E+01  .5861E+00  -.3747E-01  .1001E+01  .5745E+00  .2101E+00
      140      .1333E+01  .1806E+01  .8275E+01   .1011E+01  .5487E+00  -.3840E-01  .1001E+01  .5367E+00  .2273E+00
      200      .1425E+01  .1746E+01  .8666E+01   .1010E+01  .5118E+00  -.4002E-01  .1001E+01  .4997E+00  .2432E+00
      260      .1510E+01  .1671E+01  .9023E+01   .1009E+01  .4752E+00  -.4208E-01  .1001E+01  .4634E+00  .2581E+00
      320      .1591E+01  .1585E+01  .9352E+01   .1009E+01  .4393E+00  -.4450E-01  .1001E+01  .4278E+00  .2722E+00
      380      .1667E+01  .1492E+01  .9656E+01   .1009E+01  .4041E+00  -.4714E-01  .1001E+01  .3931E+00  .2856E+00
      440      .1740E+01  .1393E+01  .9941E+01   .1009E+01  .3699E+00  -.4991E-01  .1001E+01  .3595E+00  .2983E+00
      520      .1831E+01  .1256E+01  .1029E+02   .1009E+01  .3260E+00  -.5368E-01  .1001E+01  .3165E+00  .3146E+00
      600      .1916E+01  .1117E+01  .1062E+02   .1009E+01  .2842E+00  -.5740E-01  .1000E+01  .2756E+00  .3302E+00


                 REACTION TYPE   1 IS TOTAL        REACTION TYPE   0 IS ABSORPTION
                 SIGMA ZERO  .4971E+02 BARNS       SIGMA ZERO  .3321E+02 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S

        0      .1039E+01  .1047E+01  .2357E+01   .1015E+01  .6380E+00  -.3557E-01
       20      .1051E+01  .1037E+01  .2417E+01   .1014E+01  .6247E+00  -.3514E-01
       80      .1086E+01  .1005E+01  .2580E+01   .1012E+01  .5860E+00  -.3483E-01
      140      .1118E+01  .96588E+00 .2723E+01   .1011E+01  .5485E+00  -.3556E-01
      200      .1147E+01  .9213E+00  .2852E+01   .1010E+01  .5126E+00  -.3699E-01
      260      .1176E+01  .8721E+00  .2969E+01   .1009E+01  .4751E+00  -.3887E-01
      320      .1202E+01  .8197E+00  .3077E+01   .1009E+01  .4392E+00  -.4111E-01
      380      .1227E+01  .7651E+00  .3176E+01   .1009E+01  .4040E+00  -.4358E-01
      440      .1251E+01  .7095E+00  .3269E+01   .1009E+01  .3698E+00  -.4619E-01
      520      .1282E+01  .6347E+00  .3384E+01   .1009E+01  .3259E+00  -.4974E-01
      600      .1310E+01  .5605E+00  .3491E+01   .1009E+01  .2841E+00  -.5326E-01
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--- MAT CM241    (962410)  ENDF ID ( 8641)
                 REACTION TYPE   2 IS SCATTER      REACTION TYPE  18 IS FISSION     REACTION TYPE 102 IS N-GAMMA
                 SIGMA ZERO  .1208E+02 BARNS       SIGMA ZERO  .2600E+04 BARNS      SIGMA ZERO  .2503E+03 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S          G          GE         S

        0      .1089E+01  .1920E+01  .1482E+02   .1001E+01  .6276E+00  -.6666E-04  .1001E+01  .6277E+00  -.1673E-02
       20      .1128E+01  .1920E+01  .1528E+02   .1001E+01  .6139E+00  -.5324E-04  .1001E+01  .6140E+00  -.1719E-02
       80      .1238E+01  .1902E+01  .1654E+02   .1001E+01  .5744E+00  -.2691E-04  .1001E+01  .5745E+00  -.1877E-02
      140      .1339E+01  .1862E+01  .1768E+02   .1001E+01  .5366E+00  .9246E-05   .1001E+01  .5368E+00  -.2004E-02
      200      .1433E+01  .1802E+01  .1872E+02   .1001E+01  .4997E+00  .1982E-04   .1001E+01  .4998E+00  -.2147E-02
      260      .1521E+01  .1727E+01  .1969E+02   .1001E+01  .4633E+00  .3213E-04   .1001E+01  .4635E+00  -.2293E-02
      320      .1605E+01  .1640E+01  .2060E+02   .1001E+01  .4277E+00  .2501E-04   .1001E+01  .4279E+00  -.2435E-02
      380      .1684E+01  .1545E+01  .2145E+02   .1001E+01  .3931E+00  .3515E-04   .1001E+01  .3932E+00  -.2562E-02
      440      .1759E+01  .1444E+01  .2226E+02   .1001E+01  .3595E+00  .5165E-04   .1001E+01  .3596E+00  -.2679E-02
      520      .1854E+01  .1303E+01  .2328E+02   .1001E+01  .3164E+00  .1699E-03   .1001E+01  .3165E+00  -.2730E-02
      600      .1943E+01  .1159E+01  .2424E+02   .1000E+01  .2756E+00  .4445E-03   .1000E+01  .2757E+00  -.2603E-02


                 REACTION TYPE   1 IS TOTAL        REACTION TYPE   0 IS ABSORPTION
                 SIGMA ZERO  .2862E+04 BARNS       SIGMA ZERO  .2850E+04 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S

        0      .1002E+01  .6331E+00  .6236E-01   .1001E+01  .6276E+00  -.2078E-03
       20      .1002E+01  .6194E+00  .6428E-01   .1001E+01  .6139E+00  -.1995E-03
       80      .1002E+01  .5800E+00  .6961E-01   .1001E+01  .5744E+00  -.1894E-03
      140      .1003E+01  .5422E+00  .7444E-01   .1001E+01  .5366E+00  -.1676E-03
      200      .1003E+01  .5052E+00  .7885E-01   .1001E+01  .4997E+00  -.1705E-03
      260      .1003E+01  .4687E+00  .8295E-01   .1001E+01  .4633E+00  -.1721E-03
      320      .1004E+01  .4329E+00  .8676E-01   .1001E+01  .4278E+00  -.1911E-03
      380      .1004E+01  .3979E+00  .9036E-01   .1001E+01  .3931E+00  -.1930E-03
      440      .1004E+01  .3640E+00  .9378E-01   .1001E+01  .3595E+00  -.1882E-03
      520      .1004E+01  .3206E+00  .9818E-01   .1001E+01  .3165E+00  -.8480E-04
      600      .1004E+01  .2793E+00  .1025E+00   .1000E+01  .2756E+00  .1768E-03


--- MAT CM242    (962420)  ENDF ID ( 8642)
                 REACTION TYPE   2 IS SCATTER      REACTION TYPE  18 IS FISSION     REACTION TYPE 102 IS N-GAMMA
                 SIGMA ZERO  .1061E+02 BARNS       SIGMA ZERO  .3015E+01 BARNS      SIGMA ZERO  .1714E+02 BARNS
     NEUTRON
     TEMP(C)      G          GE         S           G          GE         S          G          GE         S

        0      .1088E+01  .1893E+01  .2002E+02   .9950E+00  .5451E+00  -.3601E+00  .9954E+00  .5515E+00  .9383E+01
       20      .1126E+01  .1892E+01  .2066E+02   .9933E+00  .5299E+00  -.3698E+00  .9939E+00  .5363E+00  .9723E+01
       80      .1236E+01  .1872E+01  .2244E+02   .9883E+00  .4872E+00  -.3959E+00  .9893E+00  .4939E+00  .1068E+02
      140      .1336E+01  .1830E+01  .2407E+02   .9835E+00  .4479E+00  -.4182E+00  .9848E+00  .4547E+00  .1156E+02
      200      .1429E+01  .1770E+01  .2556E+02   .9786E+00  .4111E+00  -.4378E+00  .9804E+00  .4179E+00  .1238E+02
      260      .1516E+01  .1695E+01  .2696E+02   .9739E+00  .3763E+00  -.4549E+00  .9760E+00  .3830E+00  .1315E+02
      320      .1598E+01  .1608E+01  .2826E+02   .9691E+00  .3433E+00  -.4702E+00  .9716E+00  .3498E+00  .1388E+02
      380      .1675E+01  .1513E+01  .2950E+02   .9645E+00  .3120E+00  -.4838E+00  .9672E+00  .3183E+00  .1458E+02
      440      .1749E+01  .1413E+01  .3067E+02   .9598E+00  .2826E+00  -.4960E+00  .9629E+00  .2885E+00  .1524E+02
      520      .1842E+01  .1274E+01  .3215E+02   .9536E+00  .2458E+00  -.5104E+00  .9572E+00  .2513E+00  .1609E+02
      600      .1929E+01  .1133E+01  .3355E+02   .9473E+00  .2118E+00  -.5228E+00  .9513E+00  .2167E+00  .1689E+02
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--- MAT CM244   (962440) ENDF ID (1344)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6982E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .6036E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1037E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1891E+01	.5354E+02	.9923E+00	.5205E+00	.2019E+02	.1001E+01	.6270E+00	.6187E+02
20	.1126E+01	.1890E+01	.5538E+02	.9899E+00	.5051E+00	.2093E+02	.1001E+01	.6134E+00	.6409E+02
80	.1236E+01	.1870E+01	.6056E+02	.9829E+00	.4625E+00	.2298E+02	.1000E+01	.5746E+00	.7035E+02
140	.1336E+01	.1828E+01	.6530E+02	.9760E+00	.4237E+00	.2488E+02	.9998E+00	.5374E+00	.7610E+02
200	.1429E+01	.1768E+01	.6969E+02	.9693E+00	.3878E+00	.2664E+02	.9995E+00	.5010E+00	.8144E+02
260	.1516E+01	.1692E+01	.7379E+02	.9627E+00	.3542E+00	.2829E+02	.9992E+00	.4652E+00	.8645E+02
320	.1598E+01	.1605E+01	.7767E+02	.9563E+00	.3225E+00	.2985E+02	.9989E+00	.4300E+00	.9119E+02
380	.1675E+01	.1510E+01	.8134E+02	.9500E+00	.2928E+00	.3134E+02	.9987E+00	.3957E+00	.9569E+02
440	.1749E+01	.1410E+01	.8484E+02	.9438E+00	.2648E+00	.3276E+02	.9985E+00	.3623E+00	.9999E+02
520	.1842E+01	.1272E+01	.8928E+02	.9357E+00	.2300E+00	.3457E+02	.9981E+00	.3195E+00	.1055E+03
600	.1929E+01	.1130E+01	.9349E+02	.9277E+00	.1980E+00	.3629E+02	.9976E+00	.2787E+00	.1106E+03

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1795E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1097E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1034E+01	.1115E+01	.5723E+02	.1000E+01	.6211E+00	.5957E+02
20	.1049E+01	.1106E+01	.5925E+02	.1000E+01	.6074E+00	.6172E+02
80	.1091E+01	.1075E+01	.6495E+02	.9992E+00	.5684E+00	.6774E+02
140	.1130E+01	.1036E+01	.7017E+02	.9985E+00	.5311E+00	.7328E+02
200	.1165E+01	.9898E+00	.7502E+02	.9978E+00	.4948E+00	.7842E+02
260	.1199E+01	.9387E+00	.7957E+02	.9972E+00	.4591E+00	.8325E+02
320	.1230E+01	.8835E+00	.8387E+02	.9966E+00	.4241E+00	.8781E+02
380	.1260E+01	.8258E+00	.8795E+02	.9960E+00	.3900E+00	.9215E+02
440	.1289E+01	.7666E+00	.9184E+02	.9955E+00	.3569E+00	.9629E+02
520	.1324E+01	.6868E+00	.9678E+02	.9947E+00	.3146E+00	.1016E+03
600	.1357E+01	.6072E+00	.1015E+03	.9937E+00	.2742E+00	.1066E+03

--- MAT CM245   (962450) ENDF ID (1345)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8894E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .2218E+04 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3420E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1829E+01	.1831E+02	.9648E+00	.3272E+00	-.3639E+00	.9603E+00	.2708E+00	-.4764E+00
20	.1126E+01	.1825E+01	.1889E+02	.9550E+00	.3132E+00	-.3547E+00	.9493E+00	.2559E+00	-.4689E+00
80	.1235E+01	.1798E+01	.2050E+02	.9268E+00	.2779E+00	-.3230E+00	.9176E+00	.2184E+00	-.4414E+00
140	.1334E+01	.1751E+01	.2197E+02	.9005E+00	.2496E+00	-.2875E+00	.8878E+00	.1890E+00	-.4089E+00
200	.1425E+01	.1687E+01	.2332E+02	.8759E+00	.2259E+00	-.2502E+00	.8599E+00	.1652E+00	-.3738E+00
260	.1510E+01	.1610E+01	.2457E+02	.8530E+00	.2052E+00	-.2125E+00	.8338E+00	.1454E+00	-.3374E+00
320	.1590E+01	.1524E+01	.2576E+02	.8316E+00	.1869E+00	-.1751E+00	.8092E+00	.1285E+00	-.3005E+00
380	.1665E+01	.1431E+01	.2687E+02	.8117E+00	.1702E+00	-.1385E+00	.7862E+00	.1139E+00	-.2638E+00
440	.1736E+01	.1333E+01	.2794E+02	.7930E+00	.1549E+00	-.1032E+00	.7645E+00	.1011E+00	-.2276E+00
520	.1824E+01	.1199E+01	.2928E+02	.7701E+00	.1360E+00	-.5823E-01	.7375E+00	.8625E-01	-.1804E+00
600	.1906E+01	.1064E+01	.3055E+02	.7490E+00	.1186E+00	-.1586E-01	.7126E+00	.7331E-01	-.1346E+00

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3076E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2016E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1027E+01	.1013E+01	.1209E+02	.9954E+00	.5505E+00	.7925E+01
20	.1040E+01	.1003E+01	.1250E+02	.9938E+00	.5354E+00	.8214E+01
80	.1074E+01	.9683E+00	.1365E+02	.9892E+00	.4929E+00	.9025E+01
140	.1106E+01	.9284E+00	.1470E+02	.9846E+00	.4537E+00	.9771E+01
200	.1135E+01	.8835E+00	.1567E+02	.9801E+00	.4169E+00	.1047E+02
260	.1162E+01	.8346E+00	.1658E+02	.9756E+00	.3820E+00	.1112E+02
320	.1187E+01	.7830E+00	.1744E+02	.9712E+00	.3488E+00	.1174E+02
380	.1211E+01	.7297E+00	.1825E+02	.9668E+00	.3174E+00	.1233E+02
440	.1234E+01	.6757E+00	.1902E+02	.9625E+00	.2876E+00	.1289E+02
520	.1262E+01	.6035E+00	.2000E+02	.9566E+00	.2504E+00	.1360E+02
600	.1288E+01	.5321E+00	.2093E+02	.9507E+00	.2160E+00	.1429E+02

--- MAT CM243   (962430) ENDF ID (1343)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6658E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .6918E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5806E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1785E+01	.2822E+02	.1005E+01	.7145E+00	.2668E+01	.1004E+01	.7055E+00	.4280E+01
20	.1121E+01	.1780E+01	.2916E+02	.1006E+01	.7033E+00	.2762E+01	.1005E+01	.6942E+00	.4433E+01
80	.1227E+01	.1750E+01	.3178E+02	.1009E+01	.6706E+00	.3028E+01	.1008E+01	.6611E+00	.4863E+01
140	.1324E+01	.1702E+01	.3417E+02	.1013E+01	.6376E+00	.3272E+01	.1011E+01	.6280E+00	.5258E+01
200	.1413E+01	.1637E+01	.3638E+02	.1017E+01	.6036E+00	.3500E+01	.1014E+01	.5940E+00	.5626E+01
260	.1495E+01	.1559E+01	.3844E+02	.1020E+01	.5684E+00	.3714E+01	.1017E+01	.5590E+00	.5973E+01
320	.1573E+01	.1473E+01	.4038E+02	.1024E+01	.5323E+00	.3917E+01	.1021E+01	.5232E+00	.6301E+01
380	.1646E+01	.1380E+01	.4221E+02	.1029E+01	.4957E+00	.4113E+01	.1024E+01	.4871E+00	.6615E+01
440	.1715E+01	.1283E+01	.4396E+02	.1033E+01	.4591E+00	.4301E+01	.1028E+01	.4509E+00	.6917E+01
520	.1800E+01	.1151E+01	.4617E+02	.1038E+01	.4106E+00	.4543E+01	.1033E+01	.4030E+00	.7303E+01
600	.1880E+01	.1018E+01	.4827E+02	.1044E+01	.3628E+00	.4777E+01	.1038E+01	.3560E+00	.7674E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .7565E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .7499E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1005E+01	.7232E+00	.3016E+01	.1005E+01	.7138E+00	.2793E+01
20	.1007E+01	.7121E+00	.3123E+01	.1006E+01	.7026E+00	.2892E+01
80	.1011E+01	.6794E+00	.3422E+01	.1009E+01	.6698E+00	.3170E+01
140	.1015E+01	.6462E+00	.3697E+01	.1013E+01	.6369E+00	.3426E+01
200	.1020E+01	.6119E+00	.3952E+01	.1016E+01	.6028E+00	.3664E+01
260	.1024E+01	.5764E+00	.4193E+01	.1020E+01	.5676E+00	.3889E+01
320	.1029E+01	.5398E+00	.4421E+01	.1024E+01	.5316E+00	.4102E+01
380	.1034E+01	.5028E+00	.4640E+01	.1028E+01	.4951E+00	.4306E+01
440	.1038E+01	.4657E+00	.4851E+01	.1032E+01	.4585E+00	.4503E+01
520	.1045E+01	.4165E+00	.5121E+01	.1038E+01	.4100E+00	.4757E+01
600	.1051E+01	.3680E+00	.5382E+01	.1043E+01	.3622E+00	.5001E+01

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2569E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2560E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9646E+00	.3249E+00	-.3142E+00	.9642E+00	.3197E+00	-.3789E+00
20	.9548E+00	.3108E+00	-.3033E+00	.9542E+00	.3056E+00	-.3699E+00
80	.9267E+00	.2753E+00	-.2667E+00	.9256E+00	.2700E+00	-.3388E+00
140	.9003E+00	.2467E+00	-.2266E+00	.8988E+00	.2415E+00	-.3037E+00
200	.8757E+00	.2229E+00	-.1851E+00	.8738E+00	.2178E+00	-.2667E+00
260	.8527E+00	.2021E+00	-.1433E+00	.8504E+00	.1972E+00	-.2292E+00
320	.8312E+00	.1837E+00	-.1020E+00	.8286E+00	.1791E+00	-.1918E+00
380	.8112E+00	.1671E+00	-.6169E-01	.8083E+00	.1627E+00	-.1553E+00
440	.7925E+00	.1518E+00	-.2267E-01	.7892E+00	.1477E+00	-.1198E+00
520	.7694E+00	.1331E+00	.2708E-01	.7657E+00	.1294E+00	-.7454E-01
600	.7482E+00	.1159E+00	.7415E-01	.7441E+00	.1126E+00	-.3172E-01

--- MAT CM246   (962460) ENDF ID (1346)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .9685E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .6325E-01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1298E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.2169E+02	.1005E+01	.6984E+00	.7735E+02	.1005E+01	.6926E+00	.8670E+02
20	.1128E+01	.1917E+01	.2239E+02	.1006E+01	.6864E+00	.8013E+02	.1006E+01	.6804E+00	.8982E+02
80	.1223E+01	.1898E+01	.2435E+02	.1010E+01	.6510E+00	.8795E+02	.1009E+01	.6447E+00	.9858E+02
140	.1339E+01	.1858E+01	.2612E+02	.1013E+01	.6157E+00	.9512E+02	.1012E+01	.6092E+00	.1066E+03
200	.1433E+01	.1799E+01	.2776E+02	.1017E+01	.5798E+00	.1018E+03	.1016E+01	.5731E+00	.1141E+03
260	.1521E+01	.1724E+01	.2929E+02	.1021E+01	.5431E+00	.1080E+03	.1019E+01	.5365E+00	.1211E+03
320	.1604E+01	.1637E+01	.3072E+02	.1024E+01	.5061E+00	.1140E+03	.1022E+01	.4996E+00	.1277E+03
380	.1683E+01	.1541E+01	.3208E+02	.1028E+01	.4691E+00	.1196E+03	.1026E+01	.4628E+00	.1341E+03
440	.1758E+01	.1440E+01	.3336E+02	.1032E+01	.4324E+00	.1249E+03	.1029E+01	.4263E+00	.1401E+03
520	.1853E+01	.1300E+01	.3499E+02	.1036E+01	.3843E+00	.1318E+03	.1033E+01	.3787E+00	.1477E+03
600	.1941E+01	.1156E+01	.3652E+02	.1041E+01	.3377E+00	.1382E+03	.1038E+01	.3325E+00	.1550E+03

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1105E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1362E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1078E+01	.1766E+01	.2965E+02	.1005E+01	.6928E+00	.8627E+02
20	.1113E+01	.1764E+01	.3065E+02	.1006E+01	.6807E+00	.8937E+02
80	.1210E+01	.1744E+01	.3343E+02	.1009E+01	.6450E+00	.9809E+02
140	.1299E+01	.1704E+01	.3598E+02	.1012E+01	.6095E+00	.1061E+03
200	.1381E+01	.1648E+01	.3833E+02	.1016E+01	.5734E+00	.1135E+03
260	.1459E+01	.1577E+01	.4053E+02	.1019E+01	.5368E+00	.1205E+03
320	.1532E+01	.1497E+01	.4260E+02	.1022E+01	.4999E+00	.1271E+03
380	.1602E+01	.1408E+01	.4456E+02	.1026E+01	.4631E+00	.1334E+03
440	.1668E+01	.1315E+01	.4643E+02	.1029E+01	.4266E+00	.1394E+03
520	.1752E+01	.1186E+01	.4879E+02	.1034E+01	.3790E+00	.1470E+03
600	.1830E+01	.1055E+01	.5103E+02	.1038E+01	.3327E+00	.1542E+03

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--- MAT CM247   (962470) ENDF ID (8647)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8404E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .8344E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5817E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1084E+01	.1769E+01	.2027E+02	.1024E+01	.1318E+01	.9742E+01	.1022E+01	.1268E+01	.9223E+01
20	.1122E+01	.1763E+01	.2092E+02	.1029E+01	.1330E+01	.1010E+02	.1027E+01	.1279E+01	.9568E+01
80	.1229E+01	.1729E+01	.2274E+02	.1047E+01	.1363E+01	.1117E+02	.1043E+01	.1308E+01	.1058E+02
140	.1326E+01	.1676E+01	.2440E+02	.1065E+01	.1388E+01	.1224E+02	.1060E+01	.1329E+01	.1159E+02
200	.1415E+01	.1608E+01	.2593E+02	.1086E+01	.1400E+01	.1334E+02	.1078E+01	.1338E+01	.1264E+02
260	.1496E+01	.1527E+01	.2738E+02	.1107E+01	.1398E+01	.1450E+02	.1098E+01	.1335E+01	.1373E+02
320	.1576E+01	.1437E+01	.2875E+02	.1130E+01	.1383E+01	.1567E+02	.1119E+01	.1318E+01	.1484E+02
380	.1649E+01	.1342E+01	.3006E+02	.1155E+01	.1355E+01	.1683E+02	.1142E+01	.1290E+01	.1594E+02
440	.1718E+01	.1244E+01	.3131E+02	.1182E+01	.1317E+01	.1794E+02	.1167E+01	.1253E+01	.1698E+02
520	.1804E+01	.1111E+01	.3290E+02	.1221E+01	.1250E+01	.1927E+02	.1203E+01	.1189E+01	.1825E+02
600	.1883E+01	.9780E+00	.3442E+02	.1263E+01	.1169E+01	.2044E+02	.1241E+01	.1110E+01	.1935E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1500E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1416E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1026E+01	.1324E+01	.1013E+02	.1023E+01	.1297E+01	.9529E+01
20	.1033E+01	.1334E+01	.1050E+02	.1028E+01	.1309E+01	.9884E+01
80	.1055E+01	.1362E+01	.1159E+02	.1045E+01	.1340E+01	.1093E+02
140	.1078E+01	.1381E+01	.1267E+02	.1063E+01	.1364E+01	.1197E+02
200	.1101E+01	.1388E+01	.1377E+02	.1082E+01	.1375E+01	.1305E+02
260	.1125E+01	.1381E+01	.1492E+02	.1103E+01	.1372E+01	.1418E+02
320	.1151E+01	.1361E+01	.1608E+02	.1126E+01	.1356E+01	.1533E+02
380	.1178E+01	.1329E+01	.1723E+02	.1150E+01	.1328E+01	.1647E+02
440	.1206E+01	.1288E+01	.1832E+02	.1176E+01	.1290E+01	.1755E+02
520	.1247E+01	.1219E+01	.1964E+02	.1213E+01	.1225E+01	.1885E+02
600	.1289E+01	.1135E+01	.2080E+02	.1254E+01	.1144E+01	.1999E+02

--- MAT CM248   (962480) ENDF ID (8648)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6137E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .8734E-01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2444E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1910E+01	.6116E+02	.1003E+01	.6497E+00	.1123E+03	.1003E+01	.6518E+00	.1101E+03
20	.1128E+01	.1910E+01	.6328E+02	.1003E+01	.6365E+00	.1163E+03	.1003E+01	.6386E+00	.1141E+03
80	.1237E+01	.1891E+01	.6922E+02	.1004E+01	.5982E+00	.1276E+03	.1005E+01	.6004E+00	.1252E+03
140	.1338E+01	.1850E+01	.7467E+02	.1006E+01	.5610E+00	.1381E+03	.1006E+01	.5633E+00	.1354E+03
200	.1432E+01	.1790E+01	.7971E+02	.1007E+01	.5243E+00	.1477E+03	.1007E+01	.5266E+00	.1449E+03
260	.1520E+01	.1715E+01	.8444E+02	.1008E+01	.4878E+00	.1568E+03	.1008E+01	.4901E+00	.1539E+03
320	.1602E+01	.1628E+01	.8889E+02	.1009E+01	.4517E+00	.1654E+03	.1010E+01	.4539E+00	.1623E+03
380	.1681E+01	.1533E+01	.9312E+02	.1010E+01	.4162E+00	.1736E+03	.1011E+01	.4184E+00	.1703E+03
440	.1756E+01	.1432E+01	.9715E+02	.1011E+01	.3816E+00	.1814E+03	.1012E+01	.3837E+00	.1779E+03
520	.1850E+01	.1292E+01	.1023E+03	.1013E+01	.3370E+00	.1913E+03	.1014E+01	.3389E+00	.1877E+03
600	.1938E+01	.1149E+01	.1071E+03	.1014E+01	.2944E+00	.2007E+03	.1015E+01	.2961E+00	.1969E+03

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--- (Element, first block)

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .8668E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2531E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1063E+01	.1543E+01	.7548E+02	.1003E+01	.6517E+00	.1102E+03
20	.1091E+01	.1538E+01	.7814E+02	.1003E+01	.6385E+00	.1142E+03
80	.1169E+01	.1514E+01	.8560E+02	.1005E+01	.6003E+00	.1253E+03
140	.1241E+01	.1474E+01	.9244E+02	.1006E+01	.5632E+00	.1355E+03
200	.1308E+01	.1421E+01	.9879E+02	.1007E+01	.5265E+00	.1450E+03
260	.1370E+01	.1357E+01	.1047E+03	.1008E+01	.4900E+00	.1540E+03
320	.1429E+01	.1285E+01	.1104E+03	.1010E+01	.4538E+00	.1624E+03
380	.1485E+01	.1208E+01	.1157E+03	.1011E+01	.4183E+00	.1704E+03
440	.1539E+01	.1126E+01	.1208E+03	.1012E+01	.3836E+00	.1781E+03
520	.1606E+01	.1014E+01	.1272E+03	.1014E+01	.3389E+00	.1878E+03
600	.1668E+01	.9000E+00	.1334E+03	.1015E+01	.2960E+00	.1970E+03

--- MAT CO59 (270590) ENDF ID (1327)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5364E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3723E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4260E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1571E+03	.1001E+01	.6291E+00	.1684E+01	.1012E+01	.7917E+00	.2125E+02
20	.1128E+01	.1920E+01	.1627E+03	.1001E+01	.6154E+00	.1745E+01	.1017E+01	.7796E+00	.2201E+02
80	.1238E+01	.1902E+01	.1783E+03	.1002E+01	.5760E+00	.1915E+01	.1031E+01	.7430E+00	.2413E+02
140	.1339E+01	.1862E+01	.1927E+03	.1002E+01	.5382E+00	.2071E+01	.1044E+01	.7049E+00	.2607E+02
200	.1433E+01	.1803E+01	.2060E+03	.1002E+01	.5012E+00	.2216E+01	.1056E+01	.6651E+00	.2788E+02
260	.1522E+01	.1728E+01	.2185E+03	.1002E+01	.4650E+00	.2352E+01	.1067E+01	.6240E+00	.2957E+02
320	.1605E+01	.1641E+01	.2303E+03	.1002E+01	.4293E+00	.2481E+01	.1078E+01	.5819E+00	.3117E+02
380	.1684E+01	.1545E+01	.2415E+03	.1002E+01	.3946E+00	.2603E+01	.1088E+01	.5395E+00	.3269E+02
440	.1759E+01	.1444E+01	.2522E+03	.1002E+01	.3609E+00	.2720E+01	.1097E+01	.4973E+00	.3413E+02
520	.1854E+01	.1303E+01	.2658E+03	.1002E+01	.3177E+00	.2869E+01	.1109E+01	.4418E+00	.3597E+02
600	.1943E+01	.1160E+01	.2787E+03	.1001E+01	.2767E+00	.3010E+01	.1120E+01	.3879E+00	.3772E+02

--- MAT CR-NAT (240000) ENDF ID (1324)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4590E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3100E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7690E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2228E+02	.1001E+01	.6277E+00	.8971E-01	.1054E+01	.1399E+01	.1334E+02
20	.1128E+01	.1920E+01	.2300E+02	.1001E+01	.6140E+00	.9292E-01	.1077E+01	.1393E+01	.1377E+02
80	.1238E+01	.1902E+01	.2502E+02	.1001E+01	.5745E+00	.1020E+00	.1143E+01	.1367E+01	.1497E+02
140	.1339E+01	.1862E+01	.2685E+02	.1001E+01	.5367E+00	.1104E+00	.1203E+01	.1328E+01	.1607E+02
200	.1433E+01	.1802E+01	.2854E+02	.1001E+01	.4998E+00	.1181E+00	.1259E+01	.1277E+01	.1708E+02
260	.1521E+01	.1727E+01	.3011E+02	.1001E+01	.4634E+00	.1254E+00	.1312E+01	.1218E+01	.1803E+02
320	.1605E+01	.1640E+01	.3159E+02	.1001E+01	.4278E+00	.1323E+00	.1361E+01	.1152E+01	.1891E+02
380	.1684E+01	.1545E+01	.3299E+02	.1001E+01	.3932E+00	.1388E+00	.1409E+01	.1081E+01	.1975E+02
440	.1759E+01	.1444E+01	.3432E+02	.1001E+01	.3595E+00	.1450E+00	.1453E+01	.1007E+01	.2054E+02
520	.1854E+01	.1303E+01	.3599E+02	.1001E+01	.3165E+00	.1531E+00	.1510E+01	.9053E+00	.2155E+02
600	.1943E+01	.1159E+01	.3758E+02	.1000E+01	.2757E+00	.1609E+00	.1563E+01	.8030E+00	.2249E+02

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--- MAT CS133 (551330) ENDF ID (1355)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4958E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2961E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3456E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1906E+01	.3318E+02	.1003E+01	.6540E+00	.1361E+02	.1015E+01	.8336E+00	.1642E+02
20	.1127E+01	.1905E+01	.3429E+02	.1003E+01	.6409E+00	.1410E+02	.1021E+01	.8222E+00	.1700E+02
80	.1237E+01	.1886E+01	.3741E+02	.1005E+01	.6029E+00	.1547E+02	.1038E+01	.7869E+00	.1862E+02
140	.1338E+01	.1845E+01	.4025E+02	.1006E+01	.5659E+00	.1673E+02	.1054E+01	.7494E+00	.2011E+02
200	.1431E+01	.1785E+01	.4288E+02	.1008E+01	.5293E+00	.1791E+02	.1068E+01	.7094E+00	.2149E+02
260	.1519E+01	.1710E+01	.4534E+02	.1009E+01	.4928E+00	.1900E+02	.1082E+01	.6674E+00	.2278E+02
320	.1601E+01	.1623E+01	.4766E+02	.1010E+01	.4566E+00	.2004E+02	.1095E+01	.6239E+00	.2400E+02
380	.1680E+01	.1528E+01	.4985E+02	.1012E+01	.4210E+00	.2103E+02	.1107E+01	.5798E+00	.2516E+02
440	.1754E+01	.1427E+01	.5193E+02	.1013E+01	.3862E+00	.2197E+02	.1119E+01	.5355E+00	.2627E+02
520	.1848E+01	.1287E+01	.5457E+02	.1015E+01	.3413E+00	.2317E+02	.1134E+01	.4770E+00	.2767E+02
600	.1936E+01	.1145E+01	.5707E+02	.1016E+01	.2983E+00	.2431E+02	.1148E+01	.4197E+00	.2901E+02

--- MAT CS134 (551340) ENDF ID (9663)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4788E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1400E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1448E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3727E+02	.1001E+01	.6277E+00	.1152E+02	.1004E+01	.6704E+00	.2347E+01
20	.1128E+01	.1920E+01	.3853E+02	.1001E+01	.6139E+00	.1194E+02	.1005E+01	.6571E+00	.2428E+01
80	.1238E+01	.1902E+01	.4206E+02	.1001E+01	.5745E+00	.1311E+02	.1009E+01	.6184E+00	.2658E+01
140	.1339E+01	.1862E+01	.4528E+02	.1001E+01	.5367E+00	.1418E+02	.1012E+01	.5805E+00	.2868E+01
200	.1433E+01	.1802E+01	.4826E+02	.1001E+01	.4997E+00	.1517E+02	.1015E+01	.5428E+00	.3063E+01
260	.1521E+01	.1727E+01	.5105E+02	.1001E+01	.4634E+00	.1610E+02	.1018E+01	.5052E+00	.3245E+01
320	.1605E+01	.1640E+01	.5368E+02	.1001E+01	.4278E+00	.1699E+02	.1021E+01	.4679E+00	.3417E+01
380	.1684E+01	.1545E+01	.5617E+02	.1001E+01	.3931E+00	.1782E+02	.1024E+01	.4312E+00	.3581E+01
440	.1759E+01	.1444E+01	.5853E+02	.1001E+01	.3595E+00	.1863E+02	.1026E+01	.3954E+00	.3737E+01
520	.1854E+01	.1303E+01	.6153E+02	.1001E+01	.3165E+00	.1964E+02	.1029E+01	.3491E+00	.3934E+01
600	.1943E+01	.1159E+01	.6437E+02	.1000E+01	.2756E+00	.2061E+02	.1032E+01	.3049E+00	.4122E+01

--- MAT CS135 (551350) ENDF ID (9665)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4812E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8700E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1351E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2544E+02	.1001E+01	.6274E+00	.7245E+01	.1032E+01	.1088E+01	.1372E+02
20	.1128E+01	.1920E+01	.2627E+02	.1001E+01	.6136E+00	.7506E+01	.1046E+01	.1079E+01	.1419E+02
80	.1238E+01	.1902E+01	.2861E+02	.1001E+01	.5742E+00	.8239E+01	.1086E+01	.1047E+01	.1549E+02
140	.1339E+01	.1862E+01	.3073E+02	.1001E+01	.5364E+00	.8912E+01	.1122E+01	.1008E+01	.1668E+02
200	.1433E+01	.1802E+01	.3270E+02	.1001E+01	.4994E+00	.9537E+01	.1155E+01	.9634E+00	.1779E+02
260	.1521E+01	.1727E+01	.3453E+02	.1001E+01	.4631E+00	.1012E+02	.1186E+01	.9133E+00	.1881E+02
320	.1605E+01	.1640E+01	.3625E+02	.1001E+01	.4275E+00	.1068E+02	.1216E+01	.8594E+00	.1978E+02
380	.1684E+01	.1545E+01	.3787E+02	.1001E+01	.3929E+00	.1121E+02	.1244E+01	.8031E+00	.2070E+02
440	.1759E+01	.1444E+01	.3942E+02	.1001E+01	.3593E+00	.1171E+02	.1271E+01	.7454E+00	.2158E+02
520	.1854E+01	.1303E+01	.4138E+02	.1001E+01	.3163E+00	.1235E+02	.1304E+01	.6676E+00	.2269E+02
600	.1943E+01	.1159E+01	.4323E+02	.1000E+01	.2755E+00	.1296E+02	.1336E+01	.5901E+00	.2374E+02

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--- MAT CS136   (551360) ENDF ID (9667)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3844E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1300E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5144E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.5463E+02	.1001E+01	.6297E+00	.3290E+02	.1067E+01	.1593E+01	.4913E+02
20	.1128E+01	.1919E+01	.5651E+02	.1001E+01	.6160E+00	.3408E+02	.1096E+01	.1589E+01	.5084E+02
80	.1238E+01	.1901E+01	.6180E+02	.1001E+01	.5767E+00	.3741E+02	.1178E+01	.1566E+01	.5563E+02
140	.1339E+01	.1860E+01	.6663E+02	.1002E+01	.5389E+00	.4047E+02	.1254E+01	.1526E+01	.6002E+02
200	.1433E+01	.1801E+01	.7112E+02	.1002E+01	.5020E+00	.4330E+02	.1324E+01	.1473E+01	.6409E+02
260	.1521E+01	.1726E+01	.7531E+02	.1002E+01	.4656E+00	.4597E+02	.1390E+01	.1407E+01	.6789E+02
320	.1604E+01	.1639E+01	.7926E+02	.1002E+01	.4300E+00	.4849E+02	.1452E+01	.1333E+01	.7148E+02
380	.1683E+01	.1544E+01	.8302E+02	.1002E+01	.3952E+00	.5088E+02	.1511E+01	.1253E+01	.7489E+02
440	.1759E+01	.1442E+01	.8659E+02	.1002E+01	.3615E+00	.5317E+02	.1567E+01	.1169E+01	.7814E+02
520	.1853E+01	.1302E+01	.9112E+02	.1002E+01	.3184E+00	.5607E+02	.1638E+01	.1053E+01	.8226E+02
600	.1942E+01	.1158E+01	.9542E+02	.1002E+01	.2773E+00	.5883E+02	.1704E+01	.9355E+00	.8617E+02

--- MAT CS137   (551370) ENDF ID (9669)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4859E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1100E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4969E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2187E+02	.1001E+01	.6277E+00	.4269E+01	.1087E+01	.1891E+01	.2148E+02
20	.1128E+01	.1920E+01	.2258E+02	.1001E+01	.6139E+00	.4423E+01	.1125E+01	.1891E+01	.2217E+02
80	.1238E+01	.1902E+01	.2455E+02	.1001E+01	.5745E+00	.4855E+01	.1233E+01	.1872E+01	.2411E+02
140	.1339E+01	.1862E+01	.2634E+02	.1001E+01	.5367E+00	.5251E+01	.1332E+01	.1832E+01	.2588E+02
200	.1433E+01	.1802E+01	.2800E+02	.1001E+01	.4997E+00	.5620E+01	.1424E+01	.1773E+01	.2750E+02
260	.1521E+01	.1727E+01	.2954E+02	.1001E+01	.4634E+00	.5966E+01	.1510E+01	.1699E+01	.2902E+02
320	.1605E+01	.1640E+01	.3099E+02	.1001E+01	.4278E+00	.6292E+01	.1591E+01	.1613E+01	.3044E+02
380	.1684E+01	.1545E+01	.3235E+02	.1001E+01	.3931E+00	.6603E+01	.1669E+01	.1519E+01	.3178E+02
440	.1759E+01	.1444E+01	.3365E+02	.1001E+01	.3595E+00	.6900E+01	.1742E+01	.1420E+01	.3306E+02
520	.1854E+01	.1303E+01	.3529E+02	.1001E+01	.3165E+00	.7277E+01	.1835E+01	.1281E+01	.3467E+02
600	.1943E+01	.1159E+01	.3684E+02	.1000E+01	.2756E+00	.7635E+01	.1922E+01	.1140E+01	.3620E+02

--- MAT CU-NAT   (290000) ENDF ID (1329)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8610E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3789E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1240E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.1767E+02	.1001E+01	.6266E+00	.7983E+00	.1062E+01	.1524E+01	.1251E+02
20	.1128E+01	.1919E+01	.1823E+02	.1001E+01	.6128E+00	.8271E+00	.1089E+01	.1520E+01	.1291E+02
80	.1238E+01	.1901E+01	.1978E+02	.1001E+01	.5734E+00	.9082E+00	.1166E+01	.1495E+01	.1401E+02
140	.1339E+01	.1861E+01	.2118E+02	.1001E+01	.5356E+00	.9825E+00	.1236E+01	.1456E+01	.1501E+02
200	.1433E+01	.1802E+01	.2247E+02	.1001E+01	.4987E+00	.1052E+01	.1301E+01	.1403E+01	.1593E+02
260	.1521E+01	.1726E+01	.2367E+02	.1001E+01	.4624E+00	.1117E+01	.1362E+01	.1340E+01	.1678E+02
320	.1605E+01	.1640E+01	.2480E+02	.1000E+01	.4269E+00	.1178E+01	.1420E+01	.1269E+01	.1758E+02
380	.1684E+01	.1544E+01	.2586E+02	.1000E+01	.3922E+00	.1236E+01	.1475E+01	.1192E+01	.1833E+02
440	.1759E+01	.1443E+01	.2687E+02	.1000E+01	.3587E+00	.1292E+01	.1527E+01	.1111E+01	.1905E+02
520	.1854E+01	.1302E+01	.2814E+02	.9999E+00	.3158E+00	.1362E+01	.1593E+01	.1001E+01	.1995E+02
600	.1942E+01	.1158E+01	.2934E+02	.9994E+00	.2750E+00	.1430E+01	.1654E+01	.8885E+00	.2081E+02

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--- MAT CU63   (290630) ENDF ID (6435)

	REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4500E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S
0	.8151E-02	.6276E+00	.1415E+02
20	.7890E-02	.6139E+00	.1462E+02
80	.7074E-02	.5745E+00	.1593E+02
140	.6308E-02	.5367E+00	.1714E+02
200	.5632E-02	.4997E+00	.1825E+02
260	.5049E-02	.4634E+00	.1930E+02
320	.4549E-02	.4278E+00	.2028E+02
380	.4120E-02	.3932E+00	.2122E+02
440	.3750E-02	.3596E+00	.2212E+02
520	.3333E-02	.3165E+00	.2325E+02
600	.2985E-02	.2757E+00	.2433E+02

--- MAT C12   (600001) ENDF ID (1306)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4739E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3360E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4743E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1578E+02	.1006E+01	.6360E+00	.8416E-02	.1089E+01	.1919E+01	.1577E+02
20	.1128E+01	.1920E+01	.1627E+02	.1007E+01	.6220E+00	.8125E-02	.1128E+01	.1919E+01	.1626E+02
80	.1238E+01	.1902E+01	.1763E+02	.1007E+01	.5821E+00	.7292E-02	.1238E+01	.1901E+01	.1762E+02
140	.1339E+01	.1862E+01	.1886E+02	.1008E+01	.5438E+00	.6495E-02	.1339E+01	.1861E+01	.1884E+02
200	.1433E+01	.1802E+01	.1999E+02	.1009E+01	.5064E+00	.5756E-02	.1433E+01	.1801E+01	.1997E+02
260	.1521E+01	.1727E+01	.2103E+02	.1009E+01	.4696E+00	.5082E-02	.1521E+01	.1726E+01	.2102E+02
320	.1605E+01	.1640E+01	.2201E+02	.1010E+01	.4335E+00	.4480E-02	.1604E+01	.1639E+01	.2200E+02
380	.1684E+01	.1545E+01	.2294E+02	.1010E+01	.3984E+00	.3948E-02	.1683E+01	.1544E+01	.2292E+02
440	.1759E+01	.1444E+01	.2381E+02	.1010E+01	.3643E+00	.3504E-02	.1758E+01	.1443E+01	.2380E+02
520	.1854E+01	.1303E+01	.2492E+02	.1010E+01	.3207E+00	.3074E-02	.1853E+01	.1302E+01	.2490E+02
600	.1943E+01	.1159E+01	.2596E+02	.1010E+01	.2793E+00	.2852E-02	.1942E+01	.1158E+01	.2594E+02

--- MAT DY160   (661600) ENDF ID (9864)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1946E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6101E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6296E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1777E+01	.3655E+03	.1006E+01	.7467E+00	.2952E+02	.1010E+01	.7786E+00	.3990E+02
20	.1121E+01	.1772E+01	.3786E+03	.1010E+01	.7362E+00	.3058E+02	.1013E+01	.7682E+00	.4133E+02
80	.1227E+01	.1741E+01	.4153E+03	.1015E+01	.7047E+00	.3356E+02	.1022E+01	.7367E+00	.4536E+02
140	.1323E+01	.1691E+01	.4490E+03	.1021E+01	.6723E+00	.3629E+02	.1030E+01	.7038E+00	.4905E+02
200	.1412E+01	.1625E+01	.4803E+03	.1026E+01	.6382E+00	.3884E+02	.1038E+01	.6687E+00	.5249E+02
260	.1495E+01	.1547E+01	.5097E+03	.1032E+01	.6025E+00	.4124E+02	.1046E+01	.6317E+00	.5572E+02
320	.1572E+01	.1460E+01	.5374E+03	.1038E+01	.5654E+00	.4351E+02	.1054E+01	.5930E+00	.5878E+02
380	.1645E+01	.1367E+01	.5638E+03	.1043E+01	.5276E+00	.4569E+02	.1062E+01	.5535E+00	.6170E+02
440	.1714E+01	.1271E+01	.5890E+03	.1049E+01	.4894E+00	.4779E+02	.1070E+01	.5135E+00	.6451E+02
520	.1799E+01	.1139E+01	.6210E+03	.1057E+01	.4385E+00	.5048E+02	.1080E+01	.4601E+00	.6811E+02
600	.1878E+01	.1007E+01	.6514E+03	.1065E+01	.3880E+00	.5310E+02	.1090E+01	.4071E+00	.7159E+02

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--- MAT DY161   (661610) ENDF ID (9865)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2426E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5851E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6094E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1076E+01	.1682E+01	.1655E+02	.9944E+00	.5428E+00	.1696E+01	.9977E+00	.5882E+00	.2287E+01
20	.1113E+01	.1674E+01	.1707E+02	.9927E+00	.5276E+00	.1760E+01	.9974E+00	.5733E+00	.2369E+01
80	.1215E+01	.1638E+01	.1851E+02	.9874E+00	.4852E+00	.1943E+01	.9964E+00	.5311E+00	.2603E+01
140	.1307E+01	.1585E+01	.1983E+02	.9822E+00	.4462E+00	.2112E+01	.9951E+00	.4915E+00	.2818E+01
200	.1391E+01	.1519E+01	.2104E+02	.9771E+00	.4097E+00	.2271E+01	.9936E+00	.4538E+00	.3018E+01
260	.1469E+01	.1443E+01	.2217E+02	.9721E+00	.3751E+00	.2422E+01	.9918E+00	.4176E+00	.3208E+01
320	.1541E+01	.1359E+01	.2323E+02	.9671E+00	.3424E+00	.2565E+01	.9900E+00	.3828E+00	.3387E+01
380	.1608E+01	.1270E+01	.2423E+02	.9622E+00	.3114E+00	.2702E+01	.9880E+00	.3496E+00	.3559E+01
440	.1671E+01	.1178E+01	.2518E+02	.9574E+00	.2822E+00	.2833E+01	.9858E+00	.3178E+00	.3723E+01
520	.1750E+01	.1054E+01	.2639E+02	.9510E+00	.2456E+00	.3002E+01	.9826E+00	.2778E+00	.3933E+01
600	.1822E+01	.9307E+00	.2753E+02	.9445E+00	.2118E+00	.3163E+01	.9795E+00	.2404E+00	.4134E+01

--- MAT DY162   (661620) ENDF ID (9866)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1000E-03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1991E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1991E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.7673E+07	.1005E+01	.6841E+00	.1478E+02	.1005E+01	.6841E+00	.1864E+02
20	.1128E+01	.1920E+01	.7949E+07	.1006E+01	.6716E+00	.1531E+02	.1006E+01	.6716E+00	.1930E+02
80	.1238E+01	.1902E+01	.8725E+07	.1009E+01	.6353E+00	.1680E+02	.1009E+01	.6353E+00	.2118E+02
140	.1339E+01	.1862E+01	.9437E+07	.1012E+01	.5993E+00	.1817E+02	.1012E+01	.5993E+00	.2291E+02
200	.1433E+01	.1802E+01	.1010E+08	.1015E+01	.5631E+00	.1944E+02	.1015E+01	.5631E+00	.2451E+02
260	.1521E+01	.1727E+01	.1072E+08	.1018E+01	.5264E+00	.2063E+02	.1018E+01	.5264E+00	.2601E+02
320	.1605E+01	.1640E+01	.1131E+08	.1021E+01	.4895E+00	.2176E+02	.1021E+01	.4895E+00	.2743E+02
380	.1684E+01	.1545E+01	.1187E+08	.1023E+01	.4529E+00	.2283E+02	.1023E+01	.4529E+00	.2878E+02
440	.1759E+01	.1444E+01	.1240E+08	.1026E+01	.4168E+00	.2385E+02	.1026E+01	.4168E+00	.3007E+02
520	.1854E+01	.1303E+01	.1308E+08	.1030E+01	.3698E+00	.2514E+02	.1030E+01	.3698E+00	.3171E+02
600	.1943E+01	.1159E+01	.1372E+08	.1034E+01	.3243E+00	.2637E+02	.1034E+01	.3243E+00	.3326E+02

--- MAT DY163   (661630) ENDF ID (9867)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1817E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1344E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1362E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1077E+01	.1662E+01	.1977E+03	.1004E+01	.7235E+00	.1147E+02	.1004E+01	.7360E+00	.1396E+02
20	.1114E+01	.1653E+01	.2047E+03	.1004E+01	.7138E+00	.1189E+02	.1005E+01	.7263E+00	.1446E+02
80	.1216E+01	.1613E+01	.2245E+03	.1005E+01	.6854E+00	.1306E+02	.1008E+01	.6977E+00	.1588E+02
140	.1308E+01	.1557E+01	.2426E+03	.1007E+01	.6564E+00	.1413E+02	.1011E+01	.6685E+00	.1718E+02
200	.1393E+01	.1487E+01	.2595E+03	.1010E+01	.6259E+00	.1514E+02	.1015E+01	.6374E+00	.1840E+02
260	.1470E+01	.1408E+01	.2753E+03	.1013E+01	.5936E+00	.1610E+02	.1019E+01	.6044E+00	.1956E+02
320	.1542E+01	.1322E+01	.2903E+03	.1016E+01	.5597E+00	.1703E+02	.1023E+01	.5698E+00	.2068E+02
380	.1610E+01	.1231E+01	.3045E+03	.1020E+01	.5246E+00	.1794E+02	.1027E+01	.5341E+00	.2176E+02
440	.1672E+01	.1139E+01	.3182E+03	.1024E+01	.4889E+00	.1884E+02	.1032E+01	.4976E+00	.2284E+02
520	.1750E+01	.1015E+01	.3356E+03	.1029E+01	.4407E+00	.2005E+02	.1039E+01	.4483E+00	.2426E+02
600	.1821E+01	.8926E+00	.3523E+03	.1035E+01	.3922E+00	.2129E+02	.1046E+01	.3989E+00	.2571E+02

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--- MAT DY164   (661640) ENDF ID (1031)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3890E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2521E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2910E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1068E+01	.1552E+01	.2347E+01	.9910E+00	.5066E+00	-.4591E+00	.1001E+01	.6464E+00	-.8404E-01
20	.1103E+01	.1541E+01	.2358E+01	.9885E+00	.4908E+00	-.4705E+00	.1004E+01	.6312E+00	-.9250E-01
80	.1200E+01	.1496E+01	.2377E+01	.9809E+00	.4472E+00	-.5006E+00	.1010E+01	.5874E+00	-.1161E+00
140	.1287E+01	.1438E+01	.2383E+01	.9735E+00	.40788E+00	-.5260E+00	.1015E+01	.5455E+00	-.1372E+00
200	.1365E+01	.1369E+01	.2381E+01	.9662E+00	.3716E+00	-.5476E+00	.1020E+01	.5049E+00	-.1562E+00
260	.1437E+01	.1293E+01	.2373E+01	.9590E+00	.3379E+00	-.5663E+00	.1023E+01	.4655E+00	-.1734E+00
320	.1503E+01	.1211E+01	.2362E+01	.9519E+00	.3064E+00	-.5825E+00	.1026E+01	.4274E+00	-.1890E+00
380	.1564E+01	.1127E+01	.2347E+01	.9450E+00	.2771E+00	-.5966E+00	.1028E+01	.3906E+00	-.2032E+00
440	.1620E+01	.1041E+01	.2331E+01	.9381E+00	.2496E+00	-.6090E+00	.1029E+01	.3554E+00	-.2160E+00
520	.1689E+01	.9267E+00	.2308E+01	.9291E+00	.2159E+00	-.6231E+00	.1031E+01	.3109E+00	-.2313E+00
600	.1752E+01	.8144E+00	.2285E+01	.9201E+00	.1850E+00	-.6349E+00	.1031E+01	.2692E+00	-.2446E+00

--- MAT ER166   (681660) ENDF ID (9875)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3592E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3497E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3856E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.6510E+02	.1001E+01	.6285E+00	.3883E+01	.1009E+01	.7486E+00	.9586E+01
20	.1128E+01	.1917E+01	.6737E+02	.1001E+01	.6147E+00	.4022E+01	.1013E+01	.7360E+00	.9924E+01
80	.1238E+01	.1899E+01	.7371E+02	.1001E+01	.5753E+00	.4415E+01	.1023E+01	.6986E+00	.1087E+02
140	.1339E+01	.1859E+01	.7952E+02	.1001E+01	.5375E+00	.4776E+01	.1033E+01	.6606E+00	.1174E+02
200	.1433E+01	.1799E+01	.8491E+02	.1001E+01	.5006E+00	.5111E+01	.1042E+01	.6216E+00	.1254E+02
260	.1521E+01	.1724E+01	.8995E+02	.1001E+01	.4642E+00	.5425E+01	.1050E+01	.5816E+00	.1330E+02
320	.1604E+01	.1637E+01	.9470E+02	.1001E+01	.4286E+00	.5722E+01	.1058E+01	.5412E+00	.1401E+02
380	.1683E+01	.1542E+01	.9922E+02	.1001E+01	.3939E+00	.6005E+01	.1065E+01	.5009E+00	.1469E+02
440	.1758E+01	.1441E+01	.1035E+03	.1001E+01	.3603E+00	.6274E+01	.1072E+01	.4609E+00	.1533E+02
520	.1853E+01	.1300E+01	.1090E+03	.1001E+01	.3172E+00	.6617E+01	.1081E+01	.4088E+00	.1615E+02
600	.1942E+01	.1157E+01	.1142E+03	.1001E+01	.2763E+00	.6943E+01	.1088E+01	.3583E+00	.1693E+02

--- MAT ER167   (681670) ENDF ID (9876)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1000E-03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6701E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6701E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1168E+01	.9552E+05	.7526E+07	.1055E+01	.6598E+01	.9361E+01	.1055E+01	.6612E+01	.1048E+02
20	.1388E+01	.1007E+06	.7799E+07	.1069E+01	.6891E+01	.9795E+01	.1069E+01	.6906E+01	.1096E+02
80	.5361E+01	.1170E+06	.8569E+07	.1115E+01	.7766E+01	.1107E+02	.1115E+01	.7783E+01	.1235E+02
140	.3040E+02	.1335E+06	.9279E+07	.1169E+01	.8566E+01	.1224E+02	.1169E+01	.8586E+01	.1363E+02
200	.1252E+03	.1487E+06	.9940E+07	.1237E+01	.9234E+01	.1323E+02	.1237E+01	.9256E+01	.1472E+02
260	.3788E+03	.1618E+06	.1056E+08	.1325E+01	.9751E+01	.1401E+02	.1325E+01	.9775E+01	.1559E+02
320	.9125E+03	.1728E+06	.1114E+08	.1440E+01	.1012E+02	.1456E+02	.1440E+01	.1014E+02	.1623E+02
380	.1859E+04	.1817E+06	.1169E+08	.1587E+01	.1033E+02	.1489E+02	.1587E+01	.1036E+02	.1663E+02
440	.3340E+04	.1883E+06	.1222E+08	.1769E+01	.1038E+02	.1496E+02	.1769E+01	.1041E+02	.1679E+02
520	.6301E+04	.1930E+06	.1288E+08	.2070E+01	.1019E+02	.1466E+02	.2071E+01	.1022E+02	.1658E+02
600	.1049E+05	.1919E+06	.1350E+08	.2436E+01	.9672E+01	.1388E+02	.2437E+01	.9701E+01	.1590E+02

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--- MAT EU151 (631510) ENDF ID (1357)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3398E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9197E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9200E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.9215E+00	.1671E+02	.1000E+03	.9221E+00	.1113E+01	.4821E+00	.9221E+00	.1119E+01	.5189E+00
20	.9350E+00	.1760E+02	.1040E+03	.9010E+00	.1155E+01	.5660E+00	.9010E+00	.1161E+01	.6042E+00
80	.9767E+00	.2032E+02	.1154E+03	.8459E+00	.1278E+01	.8029E+00	.8460E+00	.1285E+01	.8452E+00
140	.1032E+01	.2286E+02	.1260E+03	.8028E+00	.1384E+01	.1003E+01	.8029E+00	.1392E+01	.1050E+01
200	.1121E+01	.2502E+02	.1356E+03	.7711E+00	.1463E+01	.1158E+01	.7713E+00	.1471E+01	.1208E+01
260	.1264E+01	.2674E+02	.1443E+03	.7507E+00	.1513E+01	.1265E+01	.7509E+00	.1522E+01	.1318E+01
320	.1486E+01	.2802E+02	.1520E+03	.7414E+00	.1534E+01	.1325E+01	.7417E+00	.1544E+01	.1381E+01
380	.1807E+01	.2885E+02	.1585E+03	.7428E+00	.1527E+01	.1339E+01	.7432E+00	.1537E+01	.1397E+01
440	.2240E+01	.2922E+02	.1645E+03	.7542E+00	.1492E+01	.1307E+01	.7547E+00	.1502E+01	.1367E+01
520	.3004E+01	.2892E+02	.1707E+03	.7836E+00	.1406E+01	.1199E+01	.7844E+00	.1416E+01	.1262E+01
600	.3977E+01	.2762E+02	.1751E+03	.8267E+00	.1278E+01	.1026E+01	.8278E+00	.1288E+01	.1090E+01

--- MAT EU152 (631520) ENDF ID (1292)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5350E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2313E+04 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .1503E-05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1074E+01	.1798E+01	.4919E+02	.9265E+00	.2023E+00	.8318E+00	.1089E+01	.1920E+01	.1771E+02
20	.1111E+01	.1796E+01	.5089E+02	.8998E+00	.1987E+00	.9211E+00	.1128E+01	.1920E+01	.1826E+02
80	.1214E+01	.1776E+01	.5565E+02	.8284E+00	.1924E+00	.1176E+01	.1238E+01	.1902E+01	.1982E+02
140	.1307E+01	.1738E+01	.6002E+02	.7682E+00	.1899E+00	.1415E+01	.1339E+01	.1862E+01	.2122E+02
200	.1393E+01	.1683E+01	.6410E+02	.7170E+00	.1887E+00	.1642E+01	.1433E+01	.1802E+01	.2252E+02
260	.1473E+01	.1615E+01	.6793E+02	.6733E+00	.1873E+00	.1860E+01	.1521E+01	.1727E+01	.2372E+02
320	.1548E+01	.1536E+01	.7157E+02	.6356E+00	.1852E+00	.2068E+01	.1605E+01	.1640E+01	.2485E+02
380	.1619E+01	.1449E+01	.7505E+02	.6031E+00	.1822E+00	.2269E+01	.1684E+01	.1545E+01	.2592E+02
440	.1687E+01	.1357E+01	.7840E+02	.5748E+00	.1783E+00	.2461E+01	.1759E+01	.1444E+01	.2692E+02
520	.1772E+01	.1230E+01	.8268E+02	.5428E+00	.1715E+00	.2704E+01	.1854E+01	.1303E+01	.2820E+02
600	.1851E+01	.1099E+01	.8676E+02	.5162E+00	.1628E+00	.2929E+01	.1943E+01	.1159E+01	.2940E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2318E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2313E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9269E+00	.2069E+00	.9434E+00	.9265E+00	.2023E+00	.8318E+00
20	.9003E+00	.2024E+00	.1036E+01	.8998E+00	.1987E+00	.9211E+00
80	.8292E+00	.1961E+00	.1302E+01	.8284E+00	.1924E+00	.1176E+01
140	.7694E+00	.1935E+00	.1550E+01	.7682E+00	.1899E+00	.1415E+01
200	.7186E+00	.1921E+00	.1787E+01	.7170E+00	.1887E+00	.1642E+01
260	.6751E+00	.1906E+00	.2012E+01	.6733E+00	.1873E+00	.1860E+01
320	.6377E+00	.1883E+00	.2229E+01	.6356E+00	.1852E+00	.2068E+01
380	.6054E+00	.1851E+00	.2437E+01	.6031E+00	.1822E+00	.2269E+01
440	.5774E+00	.1810E+00	.2636E+01	.5748E+00	.1783E+00	.2461E+01
520	.5456E+00	.1739E+00	.2889E+01	.5428E+00	.1715E+00	.2704E+01
600	.5193E+00	.1650E+00	.3123E+01	.5162E+00	.1628E+00	.2929E+01

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--- MAT EU153 (631530) ENDF ID (1359)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6751E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2999E+03 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .9999E-06 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1078E+01	.1751E+01	.3451E+02	.9753E+00	.3833E+00	.4547E+01	.9628E+00	.1920E+01	.4476E+02
20	.1115E+01	.1745E+01	.3567E+02	.9677E+00	.3684E+00	.4727E+01	.1011E+01	.1920E+01	.4628E+02
80	.1219E+01	.1716E+01	.3894E+02	.9461E+00	.3292E+00	.5238E+01	.1142E+01	.1902E+01	.5053E+02
140	.1313E+01	.1669E+01	.4192E+02	.9259E+00	.2960E+00	.5711E+01	.1259E+01	.1862E+01	.5442E+02
200	.1399E+01	.1606E+01	.4468E+02	.9070E+00	.2670E+00	.6155E+01	.1365E+01	.1802E+01	.5802E+02
260	.1479E+01	.1531E+01	.4726E+02	.8894E+00	.2411E+00	.6574E+01	.1463E+01	.1727E+01	.6139E+02
320	.1554E+01	.1448E+01	.4969E+02	.8728E+00	.2177E+00	.6972E+01	.1553E+01	.1640E+01	.6457E+02
380	.1624E+01	.1358E+01	.5200E+02	.8572E+00	.1964E+00	.7353E+01	.1638E+01	.1545E+01	.6759E+02
440	.1691E+01	.1264E+01	.5419E+02	.8424E+00	.1768E+00	.7718E+01	.1719E+01	.1444E+01	.7046E+02
520	.1774E+01	.1135E+01	.5697E+02	.8240E+00	.1530E+00	.8184E+01	.1819E+01	.1303E+01	.7410E+02
600	.1851E+01	.1006E+01	.5961E+02	.8067E+00	.1314E+00	.8630E+01	.1912E+01	.1159E+01	.7755E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3066E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2999E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9776E+00	.4134E+00	.5207E+01	.9753E+00	.3833E+00	.4547E+01
20	.9710E+00	.3987E+00	.5409E+01	.9677E+00	.3684E+00	.4727E+01
80	.9521E+00	.3597E+00	.5980E+01	.9461E+00	.3292E+00	.5238E+01
140	.9344E+00	.3262E+00	.6509E+01	.9259E+00	.2960E+00	.5711E+01
200	.9179E+00	.2965E+00	.7003E+01	.9070E+00	.2670E+00	.6155E+01
260	.9024E+00	.2695E+00	.7470E+01	.8894E+00	.2411E+00	.6574E+01
320	.8878E+00	.2448E+00	.7913E+01	.8728E+00	.2177E+00	.6972E+01
380	.8741E+00	.2219E+00	.8336E+01	.8572E+00	.1964E+00	.7353E+01
440	.8611E+00	.2007E+00	.8741E+01	.8424E+00	.1768E+00	.7718E+01
520	.8449E+00	.1746E+00	.9258E+01	.8240E+00	.1530E+00	.8184E+01
600	.8297E+00	.1506E+00	.9753E+01	.8067E+00	.1314E+00	.8630E+01

--- MAT EU154 (631540) ENDF ID (1293)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6038E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1506E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1512E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1078E+01	.1755E+01	.3761E+02	.9261E+00	.1933E+00	.9384E+00	.9267E+00	.1995E+00	.1085E+01
20	.1115E+01	.1750E+01	.3889E+02	.8994E+00	.1891E+00	.1030E+01	.9003E+00	.1954E+00	.1182E+01
80	.1219E+01	.1721E+01	.4246E+02	.8283E+00	.1813E+00	.1291E+01	.8298E+00	.1874E+00	.1456E+01
140	.1314E+01	.1673E+01	.4574E+02	.7682E+00	.1774E+00	.1533E+01	.7704E+00	.1834E+00	.1709E+01
200	.1401E+01	.1610E+01	.4878E+02	.7171E+00	.1750E+00	.1759E+01	.7199E+00	.1808E+00	.1947E+01
260	.1482E+01	.1535E+01	.5163E+02	.6734E+00	.1729E+00	.1974E+01	.6766E+00	.1783E+00	.2173E+01
320	.1557E+01	.1450E+01	.5432E+02	.6356E+00	.1702E+00	.2181E+01	.6393E+00	.1753E+00	.2389E+01
380	.1628E+01	.1359E+01	.5690E+02	.6028E+00	.1670E+00	.2381E+01	.6069E+00	.1718E+00	.2599E+01
440	.1695E+01	.1265E+01	.5936E+02	.5743E+00	.1630E+00	.2577E+01	.5788E+00	.1674E+00	.2804E+01
520	.1778E+01	.1136E+01	.6250E+02	.5418E+00	.1567E+00	.2831E+01	.5468E+00	.1606E+00	.3069E+01
600	.1855E+01	.1006E+01	.6550E+02	.5146E+00	.1488E+00	.3075E+01	.5200E+00	.1522E+00	.3324E+01

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--- MAT EU155   (631550) ENDF ID (9832)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5277E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4040E+04 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .7008E-05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1975E+01	.3095E+02	.1001E+01	.6277E+00	.9743E-02	.1136E+01	.2470E+01	.3646E+02
20	.1128E+01	.1978E+01	.3198E+02	.1001E+01	.6139E+00	.1012E-01	.1187E+01	.2478E+01	.3767E+02
80	.1238E+01	.1969E+01	.3488E+02	.1001E+01	.5744E+00	.1109E-01	.1332E+01	.2480E+01	.4105E+02
140	.1339E+01	.1938E+01	.3753E+02	.1001E+01	.5366E+00	.1202E-01	.1466E+01	.2447E+01	.4412E+02
200	.1433E+01	.1888E+01	.3998E+02	.1001E+01	.4997E+00	.1289E-01	.1594E+01	.2385E+01	.4695E+02
260	.1522E+01	.1820E+01	.4227E+02	.1001E+01	.4634E+00	.1368E-01	.1714E+01	.2299E+01	.4959E+02
320	.1606E+01	.1739E+01	.4442E+02	.1001E+01	.4278E+00	.1442E-01	.1829E+01	.2194E+01	.5207E+02
380	.1685E+01	.1648E+01	.4647E+02	.1001E+01	.3931E+00	.1516E-01	.1939E+01	.2075E+01	.5442E+02
440	.1762E+01	.1549E+01	.4841E+02	.1001E+01	.3595E+00	.1583E-01	.2045E+01	.1946E+01	.5665E+02
520	.1858E+01	.1410E+01	.5087E+02	.1001E+01	.3165E+00	.1683E-01	.2180E+01	.1764E+01	.5946E+02
600	.1950E+01	.1264E+01	.5319E+02	.1000E+01	.2756E+00	.1793E-01	.2307E+01	.1575E+01	.6212E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .4045E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .4040E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1001E+01	.6294E+00	.5010E-01	.1001E+01	.6277E+00	.9743E-02
20	.1001E+01	.6157E+00	.5182E-01	.1001E+01	.6139E+00	.1012E-01
80	.1002E+01	.5763E+00	.5658E-01	.1001E+01	.5744E+00	.1109E-01
140	.1002E+01	.5385E+00	.6096E-01	.1001E+01	.5366E+00	.1202E-01
200	.1002E+01	.5015E+00	.6502E-01	.1001E+01	.4997E+00	.1289E-01
260	.1002E+01	.4651E+00	.6880E-01	.1001E+01	.4634E+00	.1368E-01
320	.1002E+01	.4295E+00	.7236E-01	.1001E+01	.4278E+00	.1442E-01
380	.1002E+01	.3948E+00	.7575E-01	.1001E+01	.3931E+00	.1516E-01
440	.1002E+01	.3610E+00	.7896E-01	.1001E+01	.3595E+00	.1583E-01
520	.1002E+01	.3179E+00	.8316E-01	.1001E+01	.3165E+00	.1683E-01
600	.1002E+01	.2769E+00	.8730E-01	.1000E+01	.2756E+00	.1793E-01

--- MAT EU156   (631560) ENDF ID (9833)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5299E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4820E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4873E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2908E+02	.1002E+01	.6293E+00	.2881E+01	.1003E+01	.6433E+00	.3166E+01
20	.1128E+01	.1920E+01	.3005E+02	.1002E+01	.6155E+00	.2985E+01	.1003E+01	.6297E+00	.3280E+01
80	.1238E+01	.1902E+01	.3275E+02	.1002E+01	.5761E+00	.3277E+01	.1004E+01	.5905E+00	.3598E+01
140	.1339E+01	.1862E+01	.3522E+02	.1002E+01	.5382E+00	.3546E+01	.1006E+01	.5526E+00	.3890E+01
200	.1433E+01	.1802E+01	.3749E+02	.1002E+01	.5012E+00	.3797E+01	.1007E+01	.5154E+00	.4164E+01
260	.1521E+01	.1727E+01	.3962E+02	.1002E+01	.4648E+00	.4036E+01	.1008E+01	.4785E+00	.4423E+01
320	.1605E+01	.1640E+01	.4162E+02	.1002E+01	.4292E+00	.4264E+01	.1009E+01	.4423E+00	.4670E+01
380	.1684E+01	.1545E+01	.4351E+02	.1002E+01	.3944E+00	.4485E+01	.1010E+01	.4069E+00	.4909E+01
440	.1759E+01	.1444E+01	.4531E+02	.1002E+01	.3607E+00	.4700E+01	.1011E+01	.3724E+00	.5141E+01
520	.1854E+01	.1303E+01	.4759E+02	.1002E+01	.3176E+00	.4980E+01	.1011E+01	.3283E+00	.5443E+01
600	.1943E+01	.1159E+01	.4974E+02	.1002E+01	.2766E+00	.5254E+01	.1012E+01	.2862E+00	.5738E+01

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--- MAT EU157   (631570) ENDF ID (9834)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5322E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1900E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1953E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2948E+02	.1000E+01	.6250E+00	.6970E+01	.1003E+01	.6602E+00	.7583E+01
20	.1128E+01	.1920E+01	.3046E+02	.1000E+01	.6112E+00	.7221E+01	.1004E+01	.6469E+00	.7854E+01
80	.1238E+01	.1902E+01	.3321E+02	.1000E+01	.5718E+00	.7928E+01	.1007E+01	.6080E+00	.8617E+01
140	.1339E+01	.1862E+01	.3571E+02	.9999E+00	.5341E+00	.8580E+01	.1009E+01	.5702E+00	.9319E+01
200	.1433E+01	.1802E+01	.3802E+02	.9998E+00	.4972E+00	.9189E+01	.1012E+01	.5328E+00	.9975E+01
260	.1521E+01	.1727E+01	.4018E+02	.9996E+00	.4610E+00	.9767E+01	.1014E+01	.4955E+00	.1060E+02
320	.1605E+01	.1640E+01	.4221E+02	.9994E+00	.4255E+00	.1032E+02	.1016E+01	.4586E+00	.1119E+02
380	.1684E+01	.1545E+01	.4413E+02	.9992E+00	.3910E+00	.1086E+02	.1018E+01	.4224E+00	.1176E+02
440	.1759E+01	.1444E+01	.4596E+02	.9990E+00	.3575E+00	.1138E+02	.1020E+01	.3871E+00	.1232E+02
520	.1854E+01	.1303E+01	.4827E+02	.9986E+00	.3147E+00	.1206E+02	.1022E+01	.3416E+00	.1304E+02
600	.1943E+01	.1159E+01	.5046E+02	.9979E+00	.2741E+00	.1272E+02	.1024E+01	.2982E+00	.1375E+02

--- MAT FE-NAT   (260000) ENDF ID (1326)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1140E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2560E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1396E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1305E+02	.1001E+01	.6277E+00	.8082E-01	.1073E+01	.1683E+01	.1067E+02
20	.1128E+01	.1920E+01	.1344E+02	.1001E+01	.6139E+00	.8373E-01	.1105E+01	.1680E+01	.1099E+02
80	.1238E+01	.1902E+01	.1452E+02	.1001E+01	.5745E+00	.9192E-01	.1195E+01	.1658E+01	.1187E+02
140	.1339E+01	.1862E+01	.1549E+02	.1001E+01	.5367E+00	.9944E-01	.1277E+01	.1619E+01	.1267E+02
200	.1433E+01	.1802E+01	.1639E+02	.1001E+01	.4997E+00	.1064E+00	.1354E+01	.1563E+01	.1340E+02
260	.1521E+01	.1727E+01	.1721E+02	.1001E+01	.4634E+00	.1130E+00	.1426E+01	.1495E+01	.1408E+02
320	.1605E+01	.1640E+01	.1798E+02	.1001E+01	.4278E+00	.1191E+00	.1494E+01	.1418E+01	.1471E+02
380	.1684E+01	.1545E+01	.1871E+02	.1001E+01	.3931E+00	.1250E+00	.1559E+01	.1334E+01	.1530E+02
440	.1759E+01	.1444E+01	.1939E+02	.1001E+01	.3595E+00	.1307E+00	.1620E+01	.1245E+01	.1586E+02
520	.1854E+01	.1303E+01	.2026E+02	.1001E+01	.3165E+00	.1379E+00	.1697E+01	.1122E+01	.1657E+02
600	.1943E+01	.1159E+01	.2107E+02	.1000E+01	.2756E+00	.1450E+00	.1770E+01	.9971E+00	.1723E+02

--- MAT F19   (90190) ENDF ID (1309)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3610E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9500E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3620E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2034E+02	.1001E+01	.6277E+00	.1683E+01	.1089E+01	.1917E+01	.2029E+02
20	.1128E+01	.1920E+01	.2099E+02	.1001E+01	.6139E+00	.1743E+01	.1128E+01	.1916E+01	.2094E+02
80	.1238E+01	.1902E+01	.2281E+02	.1001E+01	.5745E+00	.1913E+01	.1238E+01	.1898E+01	.2275E+02
140	.1339E+01	.1862E+01	.2446E+02	.1001E+01	.5367E+00	.2070E+01	.1338E+01	.1858E+01	.2440E+02
200	.1433E+01	.1802E+01	.2598E+02	.1001E+01	.4998E+00	.2215E+01	.1432E+01	.1799E+01	.2592E+02
260	.1522E+01	.1727E+01	.2740E+02	.1001E+01	.4634E+00	.2351E+01	.1520E+01	.1724E+01	.2733E+02
320	.1605E+01	.1640E+01	.2873E+02	.1001E+01	.4278E+00	.2480E+01	.1603E+01	.1637E+01	.2866E+02
380	.1684E+01	.1545E+01	.2999E+02	.1001E+01	.3932E+00	.2603E+01	.1682E+01	.1542E+01	.2991E+02
440	.1759E+01	.1444E+01	.3118E+02	.1001E+01	.3596E+00	.2720E+01	.1757E+01	.1441E+01	.3110E+02
520	.1854E+01	.1303E+01	.3268E+02	.1001E+01	.3165E+00	.2868E+01	.1852E+01	.1300E+01	.3260E+02
600	.1943E+01	.1159E+01	.3410E+02	.1000E+01	.2757E+00	.3010E+01	.1940E+01	.1157E+01	.3402E+02

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--- MAT GD152   (641520) ENDF ID (1362)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3074E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1442E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1749E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1891E+01	.1719E+03	.1001E+01	.6244E+00	.3002E+02	.1016E+01	.8471E+00	.5495E+02
20	.1126E+01	.1890E+01	.1780E+03	.1001E+01	.6106E+00	.3110E+02	.1023E+01	.8354E+00	.5692E+02
80	.1236E+01	.1870E+01	.1952E+03	.1001E+01	.5710E+00	.3413E+02	.1042E+01	.7993E+00	.6243E+02
140	.1336E+01	.1828E+01	.2109E+03	.1000E+01	.5333E+00	.3692E+02	.1059E+01	.7608E+00	.6749E+02
200	.1429E+01	.1768E+01	.2255E+03	.1000E+01	.4964E+00	.3951E+02	.1076E+01	.7198E+00	.7220E+02
260	.1516E+01	.1692E+01	.2392E+03	.1000E+01	.4601E+00	.4194E+02	.1091E+01	.6767E+00	.7661E+02
320	.1598E+01	.1605E+01	.2521E+03	.9999E+00	.4246E+00	.4424E+02	.1105E+01	.6321E+00	.8077E+02
380	.1675E+01	.1510E+01	.2644E+03	.9997E+00	.3901E+00	.4643E+02	.1118E+01	.5870E+00	.8473E+02
440	.1749E+01	.1410E+01	.2761E+03	.9994E+00	.3567E+00	.4851E+02	.1131E+01	.5418E+00	.8852E+02
520	.1842E+01	.1272E+01	.2910E+03	.9989E+00	.3139E+00	.5116E+02	.1147E+01	.4822E+00	.9332E+02
600	.1929E+01	.1130E+01	.3052E+03	.9982E+00	.2734E+00	.5368E+02	.1162E+01	.4239E+00	.9788E+02

--- MAT GD154   (641540) ENDF ID (1364)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1049E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8588E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9638E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1863E+01	.2199E+02	.9987E+00	.5912E+00	.2395E+01	.1008E+01	.7297E+00	.4528E+01
20	.1125E+01	.1861E+01	.2270E+02	.9980E+00	.5768E+00	.2483E+01	.1012E+01	.7166E+00	.4684E+01
80	.1233E+01	.1838E+01	.2469E+02	.9959E+00	.5358E+00	.2729E+01	.1022E+01	.6776E+00	.5120E+01
140	.1332E+01	.1795E+01	.2650E+02	.9938E+00	.4971E+00	.2956E+01	.1031E+01	.6384E+00	.5519E+01
200	.1424E+01	.1734E+01	.2816E+02	.9918E+00	.4600E+00	.3168E+01	.1039E+01	.5987E+00	.5889E+01
260	.1510E+01	.1658E+01	.2972E+02	.9898E+00	.4242E+00	.3366E+01	.1046E+01	.5585E+00	.6235E+01
320	.1590E+01	.1571E+01	.3118E+02	.9877E+00	.3897E+00	.3555E+01	.1053E+01	.5183E+00	.6562E+01
380	.1667E+01	.1477E+01	.3256E+02	.9857E+00	.3565E+00	.3734E+01	.1060E+01	.4785E+00	.6872E+01
440	.1739E+01	.1378E+01	.3387E+02	.9836E+00	.3246E+00	.3906E+01	.1066E+01	.4393E+00	.7168E+01
520	.1830E+01	.1241E+01	.3553E+02	.9807E+00	.2843E+00	.4125E+01	.1073E+01	.3885E+00	.7544E+01
600	.1915E+01	.1102E+01	.3710E+02	.9777E+00	.2465E+00	.4334E+01	.1080E+01	.3397E+00	.7900E+01

--- MAT GD155   (641550) ENDF ID (1365)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3781E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3656E+05 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3660E+05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.9180E+00	.3918E+00	.4487E+01	.8586E+00	.7353E-01	-.8838E+00	.8587E+00	.7386E-01	-.8782E+00
20	.9311E+00	.3733E+00	.4634E+01	.8443E+00	.6421E-01	-.8765E+00	.8444E+00	.6453E-01	-.8708E+00
80	.9556E+00	.3292E+00	.5071E+01	.7996E+00	.4448E-01	-.8431E+00	.7998E+00	.4478E-01	-.8370E+00
140	.9646E+00	.2958E+00	.5497E+01	.7547E+00	.3236E-01	-.8008E+00	.7549E+00	.3263E-01	-.7943E+00
200	.9640E+00	.2685E+00	.5910E+01	.7115E+00	.2445E-01	-.7558E+00	.7117E+00	.2470E-01	-.7489E+00
260	.9573E+00	.2449E+00	.6308E+01	.6708E+00	.1901E-01	-.7111E+00	.6711E+00	.1924E-01	-.7038E+00
320	.9469E+00	.2238E+00	.6691E+01	.6331E+00	.1512E-01	-.6681E+00	.6334E+00	.1533E-01	-.6605E+00
380	.9343E+00	.2043E+00	.7060E+01	.5982E+00	.1223E-01	-.6275E+00	.5985E+00	.1242E-01	-.6196E+00
440	.9205E+00	.1861E+00	.7415E+01	.5661E+00	.1002E-01	-.5895E+00	.5664E+00	.1020E-01	-.5812E+00
520	.9014E+00	.1635E+00	.7869E+01	.5272E+00	.7795E-02	-.5427E+00	.5276E+00	.7956E-02	-.5340E+00
600	.8821E+00	.1423E+00	.8302E+01	.4924E+00	.6131E-02	-.5003E+00	.4928E+00	.6272E-02	-.4912E+00

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--- MAT GD156   (641560) ENDF ID (1366)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5620E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1709E+01 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .3458E-06 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.4102E+02	.1002E+01	.6330E+00	.6646E+02	.1137E+01	.2484E+01	.3758E+02
20	.1128E+01	.1918E+01	.4242E+02	.1002E+01	.6194E+00	.6886E+02	.1188E+01	.2493E+01	.3883E+02
80	.1238E+01	.1900E+01	.4633E+02	.1002E+01	.5802E+00	.7558E+02	.1334E+01	.2495E+01	.4231E+02
140	.1339E+01	.1860E+01	.4990E+02	.1002E+01	.5425E+00	.8175E+02	.1470E+01	.2463E+01	.4549E+02
200	.1433E+01	.1800E+01	.5321E+02	.1003E+01	.5056E+00	.8748E+02	.1598E+01	.2401E+01	.4841E+02
260	.1521E+01	.1725E+01	.5630E+02	.1003E+01	.4693E+00	.9287E+02	.1719E+01	.2314E+01	.5114E+02
320	.1604E+01	.1638E+01	.5922E+02	.1003E+01	.4336E+00	.9795E+02	.1835E+01	.2208E+01	.5371E+02
380	.1683E+01	.1543E+01	.6198E+02	.1003E+01	.3987E+00	.1028E+03	.1946E+01	.2089E+01	.5613E+02
440	.1758E+01	.1442E+01	.6461E+02	.1004E+01	.3648E+00	.1074E+03	.2053E+01	.1959E+01	.5844E+02
520	.1853E+01	.1301E+01	.6794E+02	.1004E+01	.3213E+00	.1133E+03	.2188E+01	.1776E+01	.6135E+02
600	.1942E+01	.1157E+01	.7110E+02	.1004E+01	.2800E+00	.1188E+03	.2316E+01	.1586E+01	.6410E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .7329E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1709E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1068E+01	.1619E+01	.4696E+02	.1002E+01	.6330E+00	.6646E+02
20	.1099E+01	.1615E+01	.4858E+02	.1002E+01	.6194E+00	.6886E+02
80	.1183E+01	.1592E+01	.5315E+02	.1002E+01	.5802E+00	.7558E+02
140	.1261E+01	.1553E+01	.5733E+02	.1002E+01	.5425E+00	.8175E+02
200	.1333E+01	.1498E+01	.6120E+02	.1003E+01	.5056E+00	.8748E+02
260	.1400E+01	.1432E+01	.6483E+02	.1003E+01	.4693E+00	.9287E+02
320	.1464E+01	.1357E+01	.6825E+02	.1003E+01	.4336E+00	.9795E+02
380	.1525E+01	.1276E+01	.7149E+02	.1003E+01	.3987E+00	.1028E+03
440	.1582E+01	.1191E+01	.7459E+02	.1004E+01	.3648E+00	.1074E+03
520	.1655E+01	.1073E+01	.7851E+02	.1004E+01	.3213E+00	.1133E+03
600	.1723E-01	.9528E+00	.8223E+02	.1004E+01	.2800E+00	.1188E+03

--- MAT GD157   (641570) ENDF ID (1367)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6113E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1530E+06 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1536E+06 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.9026E+00	.2061E+00	-.4886E+00	.8643E+03	.7608E-01	-.9242E+00	.8644E+00	.7660E-01	-.9225E+00
20	.9127E+00	.1863E+00	-.5118E+00	.8521E+00	.6606E-01	-.9216E+00	.8524E+00	.6654E-01	-.9200E+00
80	.9269E+00	.1417E+00	-.5474E+00	.8122E+00	.4499E-01	-.8991E+00	.8126E+00	.4538E-01	-.8977E+00
140	.9242E+00	.1117E+00	-.5486E+00	.7702E+00	.3218E-01	-.8645E+00	.7708E+00	.3250E-01	-.8632E+00
200	.9111E+00	.9041E-01	-.5294E+00	.7288E+00	.2392E-01	-.8251E+00	.7295E+00	.2418E-01	-.8240E+00
260	.8919E+00	.7466E-01	-.4982E+00	.6891E+00	.1830E-01	-.7848E+00	.6899E+00	.1853E-01	-.7836E+00
320	.8692E+00	.6255E-01	-.4599E+00	.6517E+00	.1433E-01	-.7452E+00	.6526E+00	.1452E-01	-.7441E+00
380	.8447E+00	.5296E-01	-.4178E+00	.6169E+00	.1142E-01	-.7074E+00	.6178E+00	.1158E-01	-.7063E+00
440	.8195E+00	.4516E-01	-.3738E+00	.5846E+00	.9222E-02	-.6718E+00	.5855E+00	.9365E-02	-.6706E+00
520	.7856E+00	.3678E-01	-.3142E+00	.5452E+00	.7045E-02	-.6277E+00	.5462E+00	.7163E-02	-.6265E+00
600	.7529E+00	.3004E-01	-.2552E+00	.5098E+00	.5445E-02	-.5877E+00	.5108E+00	.5543E-02	-.5863E+00

--- MAT GD158   (641580) ENDF ID (1368)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3290E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2002E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5292E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.4348E+02	.1002E+01	.6344E+00	.3359E+02	.1056E+01	.1433E+01	.3974E+02
20	.1128E+01	.1918E+01	.4496E+02	.1002E+01	.6209E+00	.3480E+02	.1080E+01	.1427E+01	.4112E+02
80	.1238E+01	.1900E+01	.4912E+02	.1002E+01	.5817E+00	.3820E+02	.1149E+01	.1401E+01	.4499E+02
140	.1339E+01	.1860E+01	.5292E+02	.1003E+01	.5441E+00	.4131E+02	.1212E+01	.1362E+01	.4853E+02
200	.1433E+01	.1801E+01	.5644E+02	.1003E+01	.5072E+00	.4421E+02	.1270E+01	.1311E+01	.5181E+02
260	.1521E+01	.1726E+01	.5973E+02	.1003E+01	.4708E+00	.4693E+02	.1325E+01	.1251E+01	.5489E+02
320	.1604E+01	.1639E+01	.6283E+02	.1004E+01	.4351E+00	.4950E+02	.1377E+01	.1183E+01	.5779E+02
380	.1683E+01	.1543E+01	.6577E+02	.1004E+01	.4001E+00	.5195E+02	.1426E+01	.1111E+01	.6054E+02
440	.1759E+01	.1442E+01	.6857E+02	.1004E+01	.3662E+00	.5428E+02	.1473E+01	.1035E+01	.6316E+02
520	.1853E+01	.1301E+01	.7212E+02	.1004E+01	.3227E+00	.5724E+02	.1532E+01	.9311E+00	.6649E+02
600	.1942E+01	.1158E+01	.7548E+02	.1004E+01	.2813E+00	.6006E+02	.1587E+01	.8261E+00	.6965E+02

--- MAT GD160   (641600) ENDF ID (1370)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3620E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7636E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4384E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.4152E+02	.1000E+01	.6251E+00	.1060E+02	.1073E+01	.1694E+01	.3614E+02
20	.1128E+01	.1919E+01	.4294E+02	.1000E+01	.6114E+00	.1099E+02	.1106E+01	.1692E+01	.3737E+02
80	.1238E+01	.1901E+01	.4690E+02	.1000E+01	.5719E+00	.1206E+02	.1197E+01	.1670E+01	.4083E+02
140	.1339E+01	.1861E+01	.5052E+02	.1000E+01	.5342E+00	.1304E+02	.1280E+01	.1630E+01	.4399E+02
200	.1433E+01	.1802E+01	.5387E+02	.9998E+00	.4973E+00	.1396E+02	.1358E+01	.1575E+01	.4692E+02
260	.1521E+01	.1727E+01	.5700E+02	.9996E+00	.4611E+00	.1482E+02	.1431E+01	.1507E+01	.4965E+02
320	.1605E+01	.1640E+01	.5995E+02	.9994E+00	.4257E+00	.1563E+02	.1499E+01	.1429E+01	.5223E+02
380	.1684E+01	.1545E+01	.6275E+02	.9992E+00	.3911E+00	.1640E+02	.1564E+01	.1344E+01	.5468E+02
440	.1759E+01	.1443E+01	.6541E+02	.999CE+00	.3577E+00	.1714E+02	.1627E+01	.1254E+01	.5700E+02
520	.1854E+01	.1303E+01	.6679E+02	.9986E+00	.3148E+00	.1808E+02	.1705E+01	.1131E+01	.5995E+02
600	.1943E+01	.1159E+01	.7199E+02	.9980E+00	.2742E+00	.1897E+02	.1778E+01	.1005E+01	.6275E+02

--- MAT GE72   (320720) ENDF ID (9050)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2783E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9800E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3763E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3043E+02	.1001E+01	.6277E+00	.7290E+00	.1066E+01	.1583E+01	.2269E+02
20	.1128E+01	.1920E+01	.3144E+02	.1001E+01	.6139E+00	.7552E+00	.1095E+01	.1580E+01	.2345E+02
80	.1238E+01	.1902E+01	.3428E+02	.1001E+01	.5745E+00	.8290E+00	.1176E+01	.1556E+01	.2557E+02
140	.1339E+01	.1862E+01	.3687E+02	.1001E+01	.5367E+00	.8967E+00	.1251E+01	.1517E+01	.2750E+02
200	.1433E+01	.1802E+01	.3926E+02	.1001E+01	.4997E+00	.9596E+00	.1321E+01	.1463E+01	.2929E+02
260	.1521E+01	.1727E+01	.4150E+02	.1001E+01	.4634E+00	.1019E+01	.1386E+01	.1398E+01	.3096E+02
320	.1605E+01	.1640E+01	.4360E+02	.1001E+01	.4278E+00	.1074E+01	.1448E+01	.1324E+01	.3253E+02
380	.1684E+01	.1545E+01	.4559E+02	.1001E+01	.3931E+00	.1127E+01	.1506E+01	.1245E+01	.3401E+02
440	.1759E+01	.1444E+01	.4748E+02	.1001E+01	.3595E+00	.1178E+01	.1562E+01	.1161E+01	.3542E+02
520	.1854E+01	.1303E+01	.4988E+02	.1001E+01	.3165E+00	.1243E+01	.1632E+01	.1046E+01	.3721E+02
600	.1943E+01	.1159E+01	.5215E+02	.1000E+01	.2756E+00	.1304E+01	.1697E+01	.9290E+00	.3891E+02

--- MAT GE73   (320730) ENDF ID (9051)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7128E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1500E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1571E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1912E+01	.6000E+03	.1001E+01	.6287E+00	.4581E+01	.1005E+01	.6869E+00	.3159E+02
20	.1128E+01	.1911E+01	.6215E+03	.1001E+01	.6150E+00	.4746E+01	.1007E+01	.6738E+00	.3273E+02
80	.1238E+01	.1893E+01	.6820E+03	.1001E+01	.5756E+00	.5209E+01	.1012E+01	.6353E+00	.3591E+02
140	.1338E+01	.1852E+01	.7375E+03	.1001E+01	.5378E+00	.5635E+01	.1017E+01	.5974E+00	.3883E+02
200	.1432E+01	.1793E+01	.7890E+03	.1001E+01	.5008E+00	.6030E+01	.1021E+01	.5595E+00	.4155E+02
260	.1520E+01	.1718E+01	.8374E+03	.1001E+01	.4645E+00	.6401E+01	.1025E+01	.5213E+00	.4410E+02
320	.1603E+01	.1631E+01	.8831E+03	.1002E+01	.4289E+00	.6752E+01	.1029E+01	.4834E+00	.4650E+02
380	.1681E+01	.1535E+01	.9265E+03	.1002E+01	.3942E+00	.7085E+01	.1032E+01	.4459E+00	.4879E+02
440	.1756E+01	.1434E+01	.9680E+03	.1002E+01	.3605E+00	.7403E+01	.1036E+01	.4092E+00	.5098E+02
520	.1851E+01	.1294E+01	.1021E+04	.1001E+01	.3174E+00	.7807E+01	.1040E+01	.3617E+00	.5375E+02
600	.1939E+01	.1151E+01	.1071E+04	.1001E+01	.2765E+00	.8192E+01	.1044E+01	.3162E+00	.5639E+02

--- MAT GE74   (320740) ENDF ID (9053)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2346E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3830E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2729E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3815E+02	.1001E+01	.6277E+00	.1192E+01	.1077E+01	.1739E+01	.3296E+02
20	.1128E+01	.1919E+01	.3944E+02	.1001E+01	.6139E+00	.1235E+01	.1110E+01	.1736E+01	.3408E+02
80	.1238E+01	.1902E+01	.4306E+02	.1001E+01	.5745E+00	.1356E+01	.1205E+01	.1715E+01	.3721E+02
140	.1339E+01	.1862E+01	.4637E+02	.1001E+01	.5367E+00	.1465E+01	.1292E+01	.1676E+01	.4007E+02
200	.1433E+01	.1802E+01	.4943E+02	.1001E+01	.4997E+00	.1569E+01	.1373E+01	.1619E+01	.4271E+02
260	.1521E+01	.1727E+01	.5229E+02	.1001E+01	.4634E+00	.1666E+01	.1448E+01	.1550E+01	.4518E+02
320	.1605E+01	.1640E+01	.5498E+02	.1001E+01	.4278E+00	.1757E+01	.1520E+01	.1470E+01	.4751E+02
380	.1684E+01	.1545E+01	.5753E+02	.1001E+01	.3931E+00	.1844E+01	.1588E+01	.1383E+01	.4972E+02
440	.1759E+01	.1443E+01	.5996E+02	.1001E+01	.3595E+00	.1927E+01	.1653E+01	.1291E+01	.5182E+02
520	.1854E+01	.1303E+01	.6304E+02	.1001E+01	.3165E+00	.2032E+01	.1734E+01	.1164E+01	.5448E+02
600	.1943E+01	.1159E+01	.6596E+02	.1000E+01	.2756E+00	.2132E+01	.1810E+01	.1035E+01	.5700E+02

--- MAT GE76   (320760) ENDF ID (9056)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2977E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1420E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3119E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2479E+02	.1001E+01	.6278E+00	.9776E+01	.1085E+01	.1861E+01	.2411E+02
20	.1128E+01	.1919E+01	.2561E+02	.1001E+01	.6140E+00	.1013E+02	.1122E+01	.1860E+01	.2490E+02
80	.1238E+01	.1902E+01	.2787E+02	.1001E+01	.5746E+00	.1112E+02	.1227E+01	.1841E+01	.2711E+02
140	.1339E+01	.1862E+01	.2994E+02	.1001E+01	.5368E+00	.1202E+02	.1324E+01	.1801E+01	.2912E+02
200	.1433E+01	.1802E+01	.3185E+02	.1001E+01	.4998E+00	.1287E+02	.1414E+01	.1743E+01	.3096E+02
260	.1521E+01	.1727E+01	.3362E+02	.1001E+01	.4635E+00	.1366E+02	.1498E+01	.1670E+01	.3272E+02
320	.1605E+01	.1640E+01	.3530E+02	.1001E+01	.4279E+00	.1441E+02	.1577E+01	.1585E+01	.3434E+02
380	.1684E+01	.1545E+01	.3688E+02	.1001E+01	.3932E+00	.1512E+02	.1653E+01	.1492E+01	.3588E+02
440	.1759E+01	.1443E+01	.3838E+02	.1001E+01	.3596E+00	.1580E+02	.1724E+01	.1394E+01	.3735E+02
520	.1854E+01	.1303E+01	.4028E+02	.1001E+01	.3166E+00	.1666E+02	.1815E+01	.1258E+01	.3920E+02
600	.1943E+01	.1159E+01	.4207E+02	.1000E+01	.2757E+00	.1748E+02	.1900E+01	.1119E+01	.4095E+02

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--- MAT HE3 (20030) ENDF ID (1146)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1000E+01 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .5327E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5328E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1885E+02	.1001E+01	.6272E+00	-.2476E-02	.1001E+01	.6275E+00	.1062E-02
20	.1128E+01	.1920E+01	.1945E+02	.1001E+01	.6135E+00	-.2518E-02	.1001E+01	.6137E+00	.1132E-02
80	.1238E+01	.1902E+01	.2111E+02	.1001E+01	.5741E+00	-.2633E-02	.1001E+01	.5743E+00	.1330E-02
140	.1339E+01	.1862E+01	.2263E+02	.1001E+01	.5363E+00	-.2755E-02	.1001E+01	.5365E+00	.1492E-02
200	.1433E+01	.1802E+01	.2402E+02	.1001E+01	.4993E+00	-.2875E-02	.1001E+01	.4996E+00	.1633E-02
260	.1521E+01	.1727E+01	.2532E+02	.1001E+01	.4630E+00	-.2973E-02	.1001E+01	.4633E+00	.1779E-02
320	.1605E+01	.1640E+01	.2653E+02	.1001E+01	.4274E+00	-.3120E-02	.1001E+01	.4276E+00	.1860E-02
380	.1684E+01	.1545E+01	.2768E+02	.1001E+01	.3928E+00	-.3186E-02	.1001E+01	.3930E+00	.2010E-02
440	.1759E+01	.1444E+01	.2877E+02	.1001E+01	.3592E+00	-.3265E-02	.1001E+01	.3594E+00	.2135E-02
520	.1854E+01	.1303E+01	.3014E+02	.1001E+01	.3162E+00	-.3288E-02	.1001E+01	.3164E+00	.2369E-02
600	.1943E+01	.1159E+01	.3144E+02	.1000E+01	.2754E+00	-.3142E-02	.1000E+01	.2755E+00	.2759E-02

--- MAT HE4 (20040) ENDF ID (1270)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7592E+00 BARNS		
NEUTRON TEMP(C)	G	GE	S
0	.1089E+01	.1920E+01	.1796E+02
20	.1128E+01	.1920E+01	.1853E+02
80	.1238E+01	.1902E+01	.2011E+02
140	.1339E+01	.1862E+01	.2154E+02
200	.1433E+01	.1802E+01	.2285E+02
260	.1521E+01	.1727E+01	.2408E+02
320	.1605E+01	.1640E+01	.2523E+02
380	.1684E+01	.1545E+01	.2631E+02
440	.1759E+01	.1444E+01	.2734E+02
520	.1854E+01	.1303E+01	.2863E+02
600	.1943E+01	.1159E+01	.2985E+02

--- MAT HF-NAT (720000) ENDF ID (1372)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7508E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1039E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1114E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1909E+01	.1197E+03	.1012E+01	.8633E+00	.1994E+02	.1017E+01	.9338E+00	.2667E+02
20	.1127E+01	.1908E+01	.1239E+03	.1015E+01	.8570E+00	.2066E+02	.1022E+01	.9279E+00	.2762E+02
80	.1237E+01	.1889E+01	.1358E+03	.1023E+01	.8372E+00	.2269E+02	.1038E+01	.9081E+00	.3032E+02
140	.1338E+01	.1849E+01	.1457E+03	.1032E+01	.8145E+00	.2458E+02	.1053E+01	.8842E+00	.3281E+02
200	.1432E+01	.1789E+01	.1568E+03	.1041E+01	.7877E+00	.2638E+02	.1068E+01	.8552E+00	.3518E+02
260	.1519E+01	.1714E+01	.1664E+03	.1051E+01	.7567E+00	.2812E+02	.1083E+01	.8212E+00	.3745E+02
320	.1602E+01	.1627E+01	.1754E+03	.1061E+01	.7220E+00	.2984E+02	.1098E+01	.7830E+00	.3966E+02
380	.1681E+01	.1531E+01	.1840E+03	.1072E+01	.6843E+00	.3155E+02	.1113E+01	.7414E+00	.4183E+02
440	.1755E+01	.1431E+01	.1922E+03	.1082E+01	.6444E+00	.3324E+02	.1128E+01	.6974E+00	.4396E+02
520	.1849E+01	.1291E+01	.2027E+03	.1097E+01	.5884E+00	.3545E+02	.1148E+01	.6357E+00	.4673E+02
600	.1937E+01	.1148E+01	.2127E+03	.1113E+01	.5301E+00	.3758E+02	.1168E+01	.5717E+00	.4939E+02

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--- MAT HF174 (721740) ENDF ID (1374)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4167E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3884E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3926E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1910E+01	.1045E+03	.1001E+01	.6278E+00	.8598E+00	.1002E+01	.6415E+00	.1965E+01
20	.1128E+01	.1909E+01	.1082E+03	.1001E+01	.6141E+00	.8907E+00	.1003E+01	.6279E+00	.2035E+01
80	.1237E+01	.1890E+01	.1185E+03	.1001E+01	.5747E+00	.9777E+00	.1004E+01	.5887E+00	.2231E+01
140	.1338E+01	.1849E+01	.1280E+03	.1001E+01	.5369E+00	.1058E+01	.1005E+01	.5509E+00	.2411E+01
200	.1432E+01	.1790E+01	.1368E+03	.1001E+01	.4999E+00	.1132E+01	.1006E+01	.5137E+00	.2578E+01
260	.1519E+01	.1714E+01	.1450E+03	.1001E+01	.4636E+00	.1201E+01	.1007E+01	.4769E+00	.2735E+01
320	.1602E+01	.1628E+01	.1528E+03	.1001E+01	.4280E+00	.1267E+01	.1008E+01	.4408E+00	.2883E+01
380	.1681E+01	.1532E+01	.1602E+03	.1001E+01	.3933E+00	.1330E+01	.1008E+01	.4054E+00	.3024E+01
440	.1756E+01	.1431E+01	.1672E+03	.1001E+01	.3597E+00	.1389E+01	.1009E+01	.3711E+00	.3158E+01
520	.1850E+01	.1291E+01	.1761E+03	.1001E+01	.3166E+00	.1465E+01	.1010E+01	.3270E+00	.3328E+01
600	.1938E+01	.1149E+01	.1846E+03	.1000E+01	.2758E+00	.1538E+01	.1010E+01	.2851E+00	.3490E+01

--- MAT HF177 (721770) ENDF ID (1377)

	REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3775E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S
0	.8151E-02	.9680E+00	.2194E+02
20	.7890E-02	.9652E+00	.2269E+02
80	.7074E-02	.9543E+00	.2482E+02
140	.6308E-02	.9387E+00	.2682E+02
200	.5632E-02	.9168E+00	.2873E+02
260	.5049E-02	.8884E+00	.3062E+02
320	.4549E-02	.8543E+00	.3250E+02
380	.4120E-02	.8155E+00	.3441E+02
440	.3750E-02	.7728E+00	.3632E+02
520	.3333E-02	.7113E+00	.3885E+02
600	.2985E-02	.6453E+00	.4130E+02

--- MAT HF178 (721780) ENDF ID (1378)

	REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7442E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S
0	.8151E-02	.6606E+00	.2636E+02
20	.7890E-02	.6476E+00	.2726E+02
80	.7074E-02	.6100E+00	.2981E+02
140	.6308E-02	.5732E+00	.3214E+02
200	.5632E-02	.5366E+00	.3431E+02
260	.5049E-02	.5000E+00	.3634E+02
320	.4549E-02	.4636E+00	.3825E+02
380	.4120E-02	.4278E+00	.4007E+02
440	.3750E-02	.3927E+00	.4181E+02
520	.3333E-02	.3473E+00	.4402E+02
600	.2985E-02	.3037E+00	.4611E+02

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--- MAT HF179   (721790) ENDF ID (1383)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .4555E+01 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .4551E+02 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .5007E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1903E+01	.8318E+02	.1002E+01	.6364E+00	.1122E+02	.1010E+01	.7516E+00	.1777E+02
20	.1127E+01	.1902E+01	.8610E+02	.1002E+01	.6229E+00	.1162E+02	.1013E+01	.7392E+00	.1840E+02
80	.1237E+01	.1882E+01	.9427E+02	.1002E+01	.5839E+00	.1276E+02	.1024E+01	.7020E+00	.2017E+02
140	.1337E+01	.1841E+01	.1018E+03	.1003E+01	.5464E+00	.1380E+02	.1033E+01	.6641E+00	.2180E+02
200	.1431E+01	.1781E+01	.1087E+03	.1003E+01	.5095E+00	.1477E+02	.1042E+01	.6252E+00	.2331E+02
260	.1518E+01	.1706E+01	.1152E+03	.1004E+01	.4731E+00	.1567E+02	.1051E+01	.5853E+00	.2473E+02
320	.1601E+01	.1619E+01	.1214E+03	.1004E+01	.4373E+00	.1653E+02	.1058E+01	.5448E+00	.2607E+02
380	.1679E+01	.1524E+01	.1272E+03	.1005E+01	.4024E+00	.1735E+02	.1066E+01	.5044E+00	.2734E+02
440	.1753E+01	.1423E+01	.1327E+03	.1005E+01	.3684E+00	.1812E+02	.1073E+01	.4643E+00	.2855E+02
520	.1847E+01	.1283E+01	.1398E+03	.1005E+01	.3247E+00	.1911E+02	.1082E+01	.4120E+00	.3009E+02
600	.1935E+01	.1141E+01	.1465E+03	.1006E+01	.2832E+00	.2005E+02	.1090E+01	.3612E+00	.3156E+02

--- MAT HF180   (721800) ENDF ID (1384)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .1905E+02 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .1318E+02 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .3223E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1910E+01	.1350E+02	.1000E+01	.6212E+00	.2348E+01	.1052E+01	.1383E+01	.8938E+01
20	.1127E+01	.1909E+01	.1390E+02	.9999E+00	.6073E+00	.2433E+01	.1075E+01	.1377E+01	.9213E+01
80	.1237E+01	.1890E+01	.1503E+02	.9995E+00	.5676E+00	.2671E+01	.1140E+01	.1349E+01	.9976E+01
140	.1338E+01	.1849E+01	.1605E+02	.9992E+00	.5297E+00	.2890E+01	.1199E+01	.1310E+01	.1067E+02
200	.1432E+01	.1790E+01	.1698E+02	.9989E+00	.4927E+00	.3094E+01	.1255E+01	.1259E+01	.1130E+02
260	.1519E+01	.1715E+01	.1784E+02	.9985E+00	.4565E+00	.3285E+01	.1306E+01	.1200E+01	.1189E+02
320	.1602E+01	.1628E+01	.1865E+02	.9982E+00	.4211E+00	.3465E+01	.1355E+01	.1134E+01	.1244E+02
380	.1681E+01	.1532E+01	.1941E+02	.9978E+00	.3866E+00	.3637E+01	.1401E+01	.1064E+01	.1296E+02
440	.1755E+01	.1432E+01	.2013E+02	.9974E+00	.3533E+00	.3801E+01	.1445E+01	.9906E+00	.1345E+02
520	.1850E+01	.1292E+01	.2103E+02	.9968E+00	.3108E+00	.4009E+01	.1501E+01	.8905E+00	.1407E+02
600	.1938E+01	.1149E+01	.2188E+02	.9959E+00	.2705E+00	.4208E+01	.1553E+01	.7895E+00	.1465E+02

--- MAT HO165   (671650) ENDF ID (9872)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .3033E+01 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .6651E+02 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .6954E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1883E+01	.1341E+03	.1002E-01	.6474E+00	.1200E+02	.1006E+01	.7013E+00	.1733E+02
20	.1126E+01	.1881E+01	.1388E+03	.1003E+01	.6341E+00	.1243E+02	.1008E+01	.6885E+00	.1795E+02
80	.1235E+01	.1860E+01	.1522E+03	.1004E+01	.5958E+00	.1365E+02	.1014E+01	.6509E+00	.1969E+02
140	.1335E+01	.1817E+01	.1644E+03	.1005E+01	.5587E+00	.1476E+02	.1019E+01	.6136E+00	.2128E+02
200	.1428E+01	.1756E+01	.1757E+03	.1006E+01	.5220E+00	.1579E+02	.1024E+01	.5759E+00	.2277E+02
260	.1514E+01	.1681E+01	.1863E+03	.1007E+01	.4856E+00	.1676E+02	.1029E+01	.5377E+00	.2416E+02
320	.1596E+01	.1594E+01	.1964E+03	.1008E+01	.4496E+00	.1768E+02	.1033E+01	.4995E+00	.2547E+02
380	.1673E+01	.1499E+01	.2059E+03	.1009E+01	.4143E+00	.1855E+02	.1038E+01	.4616E+00	.2672E+02
440	.1747E+01	.1399E+01	.2150E+03	.1010E+01	.3798E+00	.1938E+02	.1042E+01	.4243E+00	.2792E+02
520	.1839E+01	.1261E+01	.2266E+03	.1011E+01	.3354E+00	.2044E+02	.1047E+01	.3758E+00	.2943E+02
600	.1925E+01	.1120E+01	.2375E+03	.1012E+01	.2929E+00	.2144E+02	.1052E+01	.3290E+00	.3087E+02

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--- MAT H1   (10010) ENDF ID (1301)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .2045E+02 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .3320E+00 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .2078E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1444E+02	.1001E+01	.6275E+00	-.1626E-02	.1087E+01	.1899E+01	.1421E+02
20	.1128E+01	.1920E+01	.1488E+02	.1001E+01	.6138E+00	-.1651E-02	.1126E+01	.1899E+01	.1464E+02
80	.1238E+01	.1902E+01	.1610E+02	.1001E+01	.5744E+00	-.1704E-02	.1234E+01	.1880E+01	.1584E+02
140	.1339E+01	.1862E+01	.1720E+02	.1001E+01	.5366E+00	-.1825E-02	.1334E+01	.1840E+01	.1693E+02
200	.1433E+01	.1802E+01	.1822E+02	.1001E+01	.4996E+00	-.1941E-02	.1426E+01	.1781E+01	.1793E+02
260	.1521E+01	.1727E+01	.1916E+02	.1001E+01	.4633E+00	-.2042E-02	.1513E+01	.1707E+01	.1885E+02
320	.1605E+01	.1640E+01	.2003E+02	.1001E+01	.4277E+00	-.2148E-02	.1595E+01	.1621E+01	.1971E+02
380	.1684E+01	.1545E+01	.2086E+02	.1001E+01	.3930E+00	-.2245E-02	.1673E+01	.1526E+01	.2053E+02
440	.1759E+01	.1444E+01	.2164E+02	.1001E+01	.3594E+00	-.2317E-02	.1747E+01	.1426E+01	.2130E+02
520	.1854E+01	.1303E+01	.2263E+02	.1001E+01	.3164E+00	-.2317E-02	.1840E+01	.1287E+01	.2227E+02
600	.1943E+01	.1159E+01	.2355E+02	.1000E+01	.2756E+00	-.2149E-02	.1928E+01	.1145E+01	.2318E+02

--- MAT H2   (10020) ENDF ID (1302)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .3395E+01 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .5060E-03 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .3396E+01 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1603E+02	.1002E+01	.6276E+00	.1592E-01	.1089E+01	.1920E+01	.1603E+02
20	.1128E+01	.1920E+01	.1653E+02	.1002E+01	.6138E+00	.1651E-01	.1128E+01	.1919E+01	.1652E+02
80	.1238E+01	.1902E+01	.1791E+02	.1002E+01	.5743E+00	.1821E-01	.1238E+01	.1901E+01	.1791E+02
140	.1339E+01	.1862E+01	.1916E+02	.1002E+01	.5365E+00	.1984E-01	.1339E+01	.1861E+01	.1916E+02
200	.1433E+01	.1802E+01	.2031E+02	.1002E+01	.4995E+00	.2137E-01	.1433E+01	.1802E+01	.2031E+02
260	.1521E+01	.1727E+01	.2138E+02	.1002E+01	.4632E+00	.2281E-01	.1521E+01	.1727E+01	.2138E+02
320	.1605E+01	.1640E+01	.2238E+02	.1002E+01	.4276E+00	.2419E-01	.1605E+01	.1640E+01	.2238E+02
380	.1684E+01	.1545E+01	.2332E+02	.1002E+01	.3929E+00	.2548E-01	.1684E+01	.1545E+01	.2332E+02
440	.1759E+01	.1444E+01	.2422E+02	.1002E+01	.3593E+00	.2678E-01	.1759E+01	.1443E+01	.2421E+02
520	.1854E+01	.1303E+01	.2534E+02	.1001E+01	.3163E+00	.2850E-01	.1854E+01	.1303E+01	.2534E+02
600	.1943E+01	.1159E+01	.2640E+02	.1001E+01	.2755E+00	.3031E-01	.1943E+01	.1159E+01	.2640E+02

--- MAT IN113   (491130) ENDF ID (9473)

REACTION TYPE 2 IS SCATTER — SIGMA ZERO .3696E+01 BARNS
REACTION TYPE 102 IS N-GAMMA — SIGMA ZERO .1140E+02 BARNS
REACTION TYPE 1 IS TOTAL — SIGMA ZERO .1510E+02 BARNS

NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1909E+01	.2641E+02	.1005E+01	.6989E+00	.2116E+02	.1026E+01	.9952E+00	.2244E+02
20	.1128E+01	.1909E+01	.2728E+02	.1006E+01	.6671E+00	.2192E+02	.1036E+01	.9861E+00	.2323E+02
80	.1237E+01	.1890E+01	.2971E+02	.1009E+01	.6525E+00	.2405E+02	.1065E+01	.9554E+00	.2544E+02
140	.1338E+01	.1849E+01	.3192E+02	.1013E+01	.6180E+00	.2602E+02	.1092E+01	.9194E+00	.2746E+02
200	.1432E+01	.1789E+01	.3397E+02	.1016E+01	.5829E+00	.2765E+02	.1118E+01	.8783E+00	.2935E+02
260	.1520E+01	.1714E+01	.3588E+02	.1019E+01	.5471E+00	.2957E+02	.1142E+01	.8327E+00	.3111E+02
320	.1602E+01	.1627E+01	.3767E+02	.1023E+01	.5107E+00	.3121E+02	.1165E+01	.7839E+00	.3279E+02
380	.1681E+01	.1532E+01	.3937E+02	.1026E+01	.4742E+00	.3278E+02	.1186E+01	.7331E+00	.3439E+02
440	.1756E+01	.1431E+01	.4098E+02	.1030E+01	.4379E+00	.3430E+02	.1207E+01	.6810E+00	.3593E+02
520	.1850E+01	.1291E+01	.4302E+02	.1034E+01	.3902E+00	.3626E+02	.1234E+01	.6107E+00	.3792E+02
600	.1938E+01	.1148E+01	.4496E+02	.1039E+01	.3437E+00	.3818E+02	.1259E+01	.5405E+00	.3984E+02

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--- MAT IN115   (491150) ENDF ID (9477)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1727E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2021E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2038E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1079E+01	.1743E+01	.1330E+03	.1016E+01	.9194E+00	.1741E+02	.1017E+01	.9264E+00	.1839E+02
20	.1116E+01	.1738E+01	.1377E+03	.1020E+01	.9143E+00	.1803E+02	.1021E+01	.9212E+00	.1905E+02
80	.1219E+01	.1708E+01	.1510E+03	.1032E+01	.8968E+00	.1979E+02	.1033E+01	.9037E+00	.2091E+02
140	.1313E+01	.1661E+01	.1633E+03	.1044E+01	.8751E+00	.2143E+02	.1046E+01	.8818E+00	.2263E+02
200	.1399E+01	.1599E+01	.1749E+03	.1056E+01	.8481E+00	.2298E+02	.1059E+01	.8544E+00	.2427E+02
260	.1479E+01	.1525E+01	.1859E+03	.1069E+01	.8157E+00	.2449E+02	.1073E+01	.8217E+00	.2585E+02
320	.1553E+01	.1442E+01	.1968E+03	.1083E+01	.7787E+00	.2598E+02	.1087E+01	.7843E+00	.2742E+02
380	.1623E+01	.1354E+01	.2075E+03	.1096E+01	.7382E+00	.2749E+02	.1101E+01	.7434E+00	.2901E+02
440	.1689E+01	.1262E+01	.2183E+03	.1110E+01	.6949E+00	.2904E+02	.1115E+01	.6997E+00	.3064E+02
520	.1771E+01	.1136E+01	.2331E+03	.1129E+01	.6339E+00	.3121E+02	.1135E+01	.6382E+00	.3292E+02
600	.1846E+01	.1009E+01	.2483E+03	.1149E+01	.5703E+00	.3350E+02	.1155E+01	.5740E+00	.3532E+02

--- MAT IN115   (491150) ENDF ID (6437)

	REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2107E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S
0	.8151E-02	.9154E+00	.5055E+01
20	.7890E-02	.9101E+00	.5193E+01
80	.7074E-02	.8924E+00	.5576E+01
140	.6308E-02	.8705E+00	.5922E+01
200	.5632E-02	.8433E+00	.6235E+01
260	.5049E-02	.8108E+00	.6520E+01
320	.4549E-02	.7739E+00	.6783E+01
380	.4120E-02	.7335E+00	.7026E+01
440	.3750E-02	.6903E+00	.7253E+01
520	.3333E-02	.6296E+00	.7534E+01
600	.2985E-02	.5664E+00	.7794E+01

--- MAT I127   (531270) ENDF ID (9606)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3203E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6201E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9404E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.4180E+02	.1001E+01	.6316E+00	.2675E+02	.1031E+01	.1069E+01	.3188E+02
20	.1128E+01	.1916E+01	.4323E+02	.1002E+01	.6180E+00	.2771E+02	.1045E+01	.1060E+01	.3300E+02
80	.1238E+01	.1898E+01	.4722E+02	.1002E+01	.5787E+00	.3042E+02	.1082E+01	.1028E+01	.3614E+02
140	.1339E+01	.1858E+01	.5086E+02	.1002E+01	.5410E+00	.3290E+02	.1117E+01	.9894E+00	.3902E+02
200	.1433E+01	.1798E+01	.5424E+02	.1002E+01	.5041E+00	.3521E+02	.1149E+01	.9449E+00	.4169E+02
260	.1521E+01	.1723E+01	.5739E+02	.1002E+01	.4677E+00	.3738E+02	.1179E+01	.8953E+00	.4419E+02
320	.1604E+01	.1636E+01	.6036E+02	.1003E+01	.4320E+00	.3942E+02	.1207E+01	.8421E+00	.4656E+02
380	.1683E+01	.1541E+01	.6318E+02	.1003E+01	.3972E+00	.4137E+02	.1234E+01	.7867E+00	.4880E+02
440	.1758E+01	.1439E+01	.6587E+02	.1003E+01	.3634E+00	.4323E+02	.1260E+01	.7299E+00	.5094E+02
520	.1852E+01	.1299E+01	.6926E+02	.1003E+01	.3201E+00	.4559E+02	.1292E+01	.6536E+00	.5365E+02
600	.1941E+01	.1156E+01	.7249E+02	.1003E+01	.2789E+00	.4783E+02	.1322E+01	.5775E+00	.5623E+02

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--- MAT I129   (531290) ENDF ID (9608)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4542E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2700E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3154E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2429E+02	.1001E+01	.6277E+00	.9490E+00	.1014E+01	.8137E+00	.4309E+01
20	.1128E+01	.1919E+01	.2508E+02	.1001E+01	.6139E+00	.9832E+00	.1019E+01	.8019E+00	.4453E+01
80	.1238E+01	.1901E+01	.2730E+02	.1001E+01	.5745E+00	.1079E+01	.1035E+01	.7655E+00	.4854E+01
140	.1339E+01	.1861E+01	.2932E+02	.1001E+01	.5367E+00	.1167E+01	.1050E+01	.7274E+00	.5220E+01
200	.1433E+01	.1802E+01	.3118E+02	.1001E+01	.4997E+00	.1249E+01	.1063E+01	.6872E+00	.5559E+01
260	.1521E+01	.1727E+01	.3292E+02	.1001E+01	.4634E+00	.1326E+01	.1076E+01	.6453E+00	.5875E+01
320	.1605E+01	.1640E+01	.3455E+02	.1001E+01	.4278E+00	.1399E+01	.1088E+01	.6024E+00	.6172E+01
380	.1684E+01	.1545E+01	.3609E+02	.1001E+01	.3931E+00	.1468E+01	.1099E+01	.5589E+00	.6453E+01
440	.1759E+01	.1443E+01	.3756E+02	.1001E+01	.3595E+00	.1534E+01	.1110E+01	.5156E+00	.6721E+01
520	.1854E+01	.1303E+01	.3941E+02	.1001E+01	.3165E+00	.1618E+01	.1124E+01	.4585E+00	.7059E+01
600	.1943E+01	.1159E+01	.4116E+02	.1000E+01	.2756E+00	.1698E+01	.1136E+01	.4028E+00	.7380E+01

--- MAT I130   (531300) ENDF ID (9609)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4692E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1800E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2269E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3120E+02	.1001E+01	.6277E+00	.1040E+02	.1019E+01	.8949E+00	.1470E+02
20	.1128E+01	.1920E+01	.3225E+02	.1001E+01	.6139E+00	.1078E+02	.1027E+01	.8839E+00	.1521E+02
80	.1238E+01	.1902E+01	.3516E+02	.1001E+01	.5745E+00	.1183E+02	.1050E+01	.8489E+00	.1665E+02
140	.1339E+01	.1862E+01	.3762E+02	.1001E+01	.5367E+00	.1279E+02	.1071E+01	.8106E+00	.1797E+02
200	.1433E+01	.1802E+01	.4028E+02	.1001E+01	.4997E+00	.1369E+02	.1091E+01	.7690E+00	.1919E+02
260	.1521E+01	.1727E+01	.4258E+02	.1001E+01	.4634E+00	.1453E+02	.1109E+01	.7240E+00	.2033E+02
320	.1605E+01	.1640E+01	.4474E+02	.1001E+01	.4278E+00	.1533E+02	.1126E+01	.6785E+00	.2141E+02
380	.1684E+01	.1545E+01	.4679E+02	.1001E+01	.3931E+00	.1609E+02	.1142E+01	.6312E+00	.2243E+02
440	.1759E+01	.1444E+01	.4874E+02	.1001E+01	.3595E+00	.1681E+02	.1158E+01	.5836E+00	.2341E+02
520	.1854E+01	.1303E+01	.5120E+02	.1001E+01	.3165E+00	.1773E+02	.1177E+01	.5204E+00	.2465E+02
600	.1943E+01	.1159E+01	.5353E+02	.1000E+01	.2756E+00	.1860E+02	.1195E+01	.4583E+00	.2582E+02

--- MAT I131   (531310) ENDF ID (9611)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4716E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7000E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5416E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2548E+02	.1001E+01	.6277E+00	.1188E+02	.1078E+01	.1753E+01	.2372E+02
20	.1128E+01	.1920E+01	.2632E+02	.1001E+01	.6139E+00	.1231E+02	.1112E+01	.1751E+01	.2451E+02
80	.1238E+01	.1902E+01	.2866E+02	.1001E+01	.5745E+00	.1351E+02	.1208E+01	.1730E+01	.2670E+02
140	.1339E+01	.1862E+01	.3079E+02	.1001E+01	.5367E+00	.1461E+02	.1296E+01	.1690E+01	.2869E+02
200	.1433E+01	.1802E+01	.3275E+02	.1001E+01	.4997E+00	.1564E+02	.1377E+01	.1634E+01	.3054E+02
260	.1521E+01	.1727E+01	.3458E+02	.1001E+01	.4634E+00	.1660E+02	.1454E+01	.1564E+01	.3226E+02
320	.1605E+01	.1640E+01	.3631E+02	.1001E+01	.4278E+00	.1751E+02	.1527E+01	.1484E+01	.3388E+02
380	.1684E+01	.1545E+01	.3794E+02	.1001E+01	.3931E+00	.1837E+02	.1596E+01	.1396E+01	.3541E+02
440	.1759E+01	.1444E+01	.3949E+02	.1001E+01	.3595E+00	.1920E+02	.1661E+01	.1303E+01	.3687E+02
520	.1854E+01	.1303E+01	.4145E+02	.1001E+01	.3165E+00	.2025E+02	.1744E+01	.1175E+01	.3871E+02
600	.1943E+01	.1159E+01	.4330E+02	.1000E+01	.2756E+00	.2124E+02	.1821E+01	.1045E+01	.4045E+02

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--- MAT I135   (531350) ENDF ID (9618)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4812E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2000E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4832E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1770E+02	.1001E+01	.6278E+00	.1992E+00	.1089E+01	.1915E+01	.1763E+02
20	.1128E+01	.1920E+01	.1826E+02	.1001E+01	.6141E+00	.2064E+00	.1128E+01	.1914E+01	.1818E+02
80	.1238E+01	.1902E+01	.1981E+02	.1001E+01	.5746E+00	.2266E+00	.1237E+01	.1896E+01	.1973E+02
140	.1339E+01	.1862E+01	.2122E+02	.1001E+01	.5368E+00	.2451E+00	.1338E+01	.1856E+01	.2113E+02
200	.1433E+01	.1802E+01	.2251E+02	.1001E+01	.4999E+00	.2623E+00	.1431E+01	.1797E+01	.2242E+02
260	.1521E+01	.1727E+01	.2371E+02	.1001E+01	.4635E+00	.2785E+00	.1519E+01	.1722E+01	.2362E+02
320	.1605E+01	.1640E+01	.2484E+02	.1001E+01	.4280E+00	.2937E+00	.1602E+01	.1635E+01	.2474E+02
380	.1684E+01	.1545E+01	.2590E+02	.1001E+01	.3933E+00	.3082E+00	.1681E+01	.1540E+01	.2580E+02
440	.1759E+01	.1444E+01	.2691E+02	.1001E+01	.3597E+00	.3220E+00	.1756E+01	.1439E+01	.2680E+02
520	.1854E+01	.1303E+01	.2819E+02	.1001E+01	.3166E+00	.3397E+00	.1850E+01	.1299E+01	.2807E+02
600	.1943E+01	.1159E+01	.2939E+02	.1000E+01	.2758E+00	.3567E+00	.1939E+01	.1155E+01	.2927E+02

--- MAT K-NAT   (190000) ENDF ID (1150)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2200E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2100E+01 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .5100E-01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1078E+01	.1799E+01	.1597E+02	.1001E+01	.6277E+00	.1377E+00	.1001E+01	.6277E+00	.1404E-02
20	.1116E+01	.1796E+01	.1647E+02	.1001E+01	.6140E+00	.1427E+00	.1001E+01	.6140E+00	.1470E-02
80	.1220E+01	.1773E+01	.1785E+02	.1001E+01	.5745E+00	.1566E+00	.1001E+01	.5745E+00	.1639E-02
140	.1316E+01	.1731E+01	.1912E+02	.1001E+01	.5367E+00	.1694E+00	.1001E+01	.5367E+00	.1789E-02
200	.1403E+01	.1673E+01	.2028E+02	.1001E+01	.4997E+00	.1813E+00	.1001E+01	.4997E+00	.1868E-02
260	.1485E+01	.1601E+01	.2136E+02	.1001E+01	.4634E+00	.1924E+00	.1001E+01	.4634E+00	.1977E-02
320	.1561E+01	.1519E+01	.2237E+02	.1001E+01	.4278E+00	.2029E+00	.1001E+01	.4278E+00	.2070E-02
380	.1633E+01	.1429E+01	.2333E+02	.1001E+01	.3931E+00	.2129E+00	.1001E+01	.3931E+00	.2146E-02
440	.1702E+01	.1335E+01	.2424E+02	.1001E+01	.3595E+00	.2225E+00	.1001E+01	.3595E+00	.2246E-02
520	.1787E+01	.1204E+01	.2539E+02	.1001E+01	.3165E+00	.2348E+00	.1001E+01	.3165E+00	.2463E-02
600	.1867E+01	.1071E+01	.2647E+02	.1000E+01	.2757E+00	.2466E+00	.1000E+01	.2757E+00	.2871E-02

	REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .4600E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4356E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2156E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1001E+01	.6277E+00	-.3097E-03	.1040E+01	.1219E+01	.8132E+01	.1001E+01	.6277E+00	.1342E+00
20	.1001E+01	.6140E+00	-.3268E-03	.1059E+01	.1211E+01	.8385E+01	.1001E+01	.6140E+00	.1390E+00
80	.1001E+01	.5745E+00	-.3195E-03	.1112E+01	.1180E+01	.9094E+01	.1001E+01	.5745E+00	.1526E+00
140	.1001E+01	.5367E+00	-.3850E-03	.1160E+01	.1140E+01	.9737E+01	.1001E+01	.5367E+00	.1651E+00
200	.1001E+01	.4997E+00	-.4223E-03	.1204E+01	.1092E+01	.1033E+02	.1001E+01	.4997E+00	.1766E+00
260	.1001E+01	.4634E+00	-.4452E-03	.1245E+01	.1038E+01	.1088E+02	.1001E+01	.4634E+00	.1875E+00
320	.1001E+01	.4278E+00	-.4985E-03	.1284E+01	.9788E+00	.1140E+02	.1001E+01	.4278E+00	.1977E+00
380	.1001E+01	.3931E+00	-.5422E-03	.1320E+01	.9165E+00	.1189E+02	.1001E+01	.3931E+00	.2075E+00
440	.1001E+01	.3595E+00	-.5728E-03	.1355E+01	.8521E+00	.1235E+02	.1001E+01	.3595E+00	.2168E+00
520	.1001E+01	.3165E+00	-.5008E-03	.1398E+01	.7647E+00	.1294E+02	.1001E+01	.3165E+00	.2288E+00
600	.1000E+01	.2757E+00	-.2478E-03	.1438E+01	.6772E+00	.1349E+02	.1000E+01	.2757E+00	.2403E+00

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--- MAT KR78   (360780) ENDF ID (1330)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8814E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4846E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1366E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.2042E+02	.1001E+01	.6259E+00	.4803E+01	.1058E+01	.1460E+01	.1488E+02
20	.1128E+01	.1918E+01	.2108E+02	.1001E+01	.6121E+00	.4976E+01	.1083E+01	.1455E+01	.1537E+02
80	.1238E+01	.1900E+01	.2290E+02	.1001E+01	.5726E+00	.5462E+01	.1154E+01	.1429E+01	.1672E+02
140	.1339E+01	.1860E+01	.2456E+02	.1001E+01	.5347E+00	.5908E+01	.1219E+01	.1390E+01	.1795E+02
200	.1433E+01	.1801E+01	.2609E+02	.1001E+01	.4978E+00	.6323E+01	.1280E+01	.1338E+01	.1908E+02
260	.1521E+01	.1726E+01	.2752E+02	.1001E+01	.4614E+00	.6712E+01	.1337E+01	.1277E+01	.2014E+02
320	.1604E+01	.1639E+01	.2885E+02	.1001E+01	.4259E+00	.7080E+01	.1390E+01	.1208E+01	.2113E+02
380	.1683E+01	.1543E+01	.3012E+02	.1001E+01	.3913E+00	.7430E+01	.1441E+01	.1134E+01	.2207E+02
440	.1759E+01	.1442E+01	.3131E+02	.1000E+01	.3577E+00	.7764E+01	.1490E+01	.1057E+01	.2296E+02
520	.1853E+01	.1301E+01	.3283E+02	.1000E+01	.3149E+00	.8188E+01	.1551E+01	.9514E+00	.2409E+02
600	.1942E+01	.1158E+01	.3426E+02	.9994E+00	.2742E+00	.8592E+01	.1608E+01	.8442E+00	.2515E+02

--- MAT KR80   (360800) ENDF ID (1331)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .9498E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1174E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2124E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.3093E+02	.1001E+01	.6270E+00	.5863E+01	.1040E+01	.1204E+01	.1707E+02
20	.1128E+01	.1916E+01	.3196E+02	.1001E+01	.6132E+00	.6074E+01	.1058E+01	.1196E+01	.1765E+02
80	.1238E+01	.1898E+01	.3485E+02	.1001E+01	.5737E+00	.6667E+01	.1107E+01	.1166E+01	.1927E+02
140	.1339E+01	.1858E+01	.3748E+02	.1001E+01	.5359E+00	.7212E+01	.1152E+01	.1127E+01	.2075E+02
200	.1433E+01	.1798E+01	.3992E+02	.1001E+01	.4989E+00	.7718E+01	.1194E+01	.1080E+01	.2212E+02
260	.1521E+01	.1723E+01	.4219E+02	.1001E+01	.4626E+00	.8193E+01	.1234E+01	.1026E+01	.2340E+02
320	.1604E+01	.1636E+01	.4433E+02	.1001E+01	.4270E+00	.8642E+01	.1271E+01	.9679E+00	.2461E+02
380	.1683E+01	.1541E+01	.4636E+02	.1001E+01	.3924E+00	.9069E+01	.1306E+01	.9061E+00	.2575E+02
440	.1758E+01	.1440E+01	.4829E+02	.1001E+01	.3588E+00	.9476E+01	.1339E+01	.8423E+00	.2684E+02
520	.1853E+01	.1299E+01	.5073E+02	.1000E+01	.3159E+00	.9994E+01	.1382E+01	.7558E+00	.2821E+02
600	.1941E+01	.1156E+01	.5304E+02	.1000E+01	.2751E+00	.1049E+02	.1421E+01	.6690E+00	.2952E+02

--- MAT KR82   (360820) ENDF ID (1332)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1015E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3017E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4032E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1912E+01	.2432E+02	.1001E+01	.6252E+00	.6118E+01	.1023E+01	.9492E+00	.1070E+02
20	.1128E+01	.1912E+01	.2511E+02	.1001E+01	.6114E+00	.6338E+01	.1033E+01	.9386E+00	.1106E+02
80	.1238E+01	.1893E+01	.2733E+02	.1001E+01	.5718E+00	.6957E+01	.1060E+01	.9043E+00	.1208E+02
140	.1338E+01	.1853E+01	.2935E+02	.1001E+01	.5339E+00	.7525E+01	.1086E+01	.8658E+00	.1302E+02
200	.1432E+01	.1793E+01	.3122E+02	.1001E+01	.4970E+00	.8054E+01	.1109E+01	.8231E+00	.1388E+02
260	.1520E+01	.1718E+01	.3296E+02	.1001E+01	.4607E+00	.8549E+01	.1131E+01	.7771E+00	.1469E+02
320	.1603E+01	.1631E+01	.3459E+02	.1000E+01	.4251E+00	.9018E+01	.1152E+01	.7286E+00	.1545E+02
380	.1681E+01	.1536E+01	.3614E+02	.1000E+01	.3906E+00	.9463E+01	.1172E+01	.6787E+00	.1618E+02
440	.1756E+01	.1435E+01	.3761E+02	.1000E+01	.3571E+00	.9889E+01	.1190E+01	.6283E+00	.1687E+02
520	.1851E+01	.1295E+01	.3947E+02	.9996E+00	.3142E+00	.1043E+02	.1214E+01	.5609E+00	.1774E+02
600	.1939E+01	.1151E+01	.4122E+02	.9989E+00	.2736E+00	.1094E+02	.1236E+01	.4945E+00	.1856E+02

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--- MAT KR83   (360830) ENDF ID (1333)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1024E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2077E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2179E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1860E+01	.1795E+02	.9967E+00	.5655E+00	.4410E+00	.1001E+01	.6263E+00	.1263E+02
20	.1124E+01	.1857E+01	.1851E+02	.9955E+00	.5506E+00	.4593E+00	.1002E+01	.6120E+00	.1308E+02
80	.1233E+01	.1835E+01	.2009E+02	.9918E+00	.5086E+00	.5114E+00	.1003E+01	.5709E+00	.1431E+02
140	.1331E+01	.1791E+01	.2153E+02	.9882E+00	.4695E+00	.5605E+00	.1004E+01	.5316E+00	.1545E+02
200	.1423E+01	.1730E+01	.2285E+02	.9847E+00	.4325E+00	.6070E+00	.1005E+01	.4935E+00	.1652E+02
260	.1509E+01	.1654E+01	.2407E+02	.9811E+00	.3972E+00	.6515E+00	.1006E+01	.4563E+00	.1752E+02
320	.1589E+01	.1568E+01	.2522E+02	.9776E+00	.3635E+00	.6943E+00	.1006E+01	.4201E+00	.1847E+02
380	.1665E+01	.1474E+01	.2631E+02	.9741E+00	.3314E+00	.7356E+00	.1007E+01	.3851E+00	.1937E+02
440	.1738E+01	.1375E+01	.2734E+02	.9705E+00	.3009E+00	.7758E+00	.1007E+01	.3513E+00	.2024E+02
520	.1828E+01	.1238E+01	.2864E+02	.9658E+00	.2625E+00	.8276E+00	.1006E+01	.3084E+00	.2135E+02
600	.1913E+01	.1100E+01	.2987E+02	.9610E+00	.2268E+00	.8779E+00	.1006E+01	.2678E+00	.2240E+02

--- MAT KR84   (360840) ENDF ID (1334)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6708E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8295E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6791E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2000E+02	.1000E+01	.6277E+00	.4514E+02	.1088E+01	.1904E+01	.2031E+02
20	.1128E+01	.1920E+01	.2064E+02	.1000E+01	.6140E+00	.4676E+02	.1127E+01	.1904E+01	.2096E+02
80	.1236E+01	.1902E+01	.2243E+02	.1001E+01	.5746E+00	.5132E+02	.1235E+01	.1885E+01	.2278E+02
140	.1339E+01	.1862E+01	.2405E+02	.1001E+01	.5368E+00	.5552E+02	.1335E+01	.1845E+01	.2443E+02
200	.1433E+01	.1802E+01	.2554E+02	.1001E+01	.4999E+00	.5941E+02	.1428E+01	.1786E+01	.2596E+02
260	.1521E+01	.1727E+01	.2693E+02	.1001E+01	.4635E+00	.6307E+02	.1515E+01	.1712E+01	.2737E+02
320	.1605E+01	.1640E+01	.2824E+02	.1001E+01	.4280E+00	.6652E+02	.1597E+01	.1625E+01	.2870E+02
380	.1684E+01	.1545E+01	.2947E+02	.1001E+01	.3933E+00	.6981E+02	.1675E+01	.1531E+01	.2996E+02
440	.1759E+01	.1443E+01	.3064E+02	.1001E+01	.3597E+00	.7294E+02	.1750E+01	.1430E+01	.3115E+02
520	.1854E+01	.1303E+01	.3211E+02	.1000E+01	.3167E+00	.7693E+02	.1843E+01	.1291E+01	.3266E+02
600	.1943E+01	.1159E+01	.3351E+02	.9999E+00	.2758E+00	.8071E+02	.1931E+01	.1148E+01	.3408E+02

--- MAT KR85   (360850) ENDF ID (9145)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3534E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1660E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5194E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2919E+02	.1001E+01	.6277E+00	.5994E+00	.1061E+01	.1507E+01	.2005E+02
20	.1128E+01	.1920E+01	.3016E+02	.1001E+01	.6139E+00	.6210E+00	.1088E+01	.1502E+01	.2072E+02
80	.1238E+01	.1902E+01	.3288E+02	.1001E+01	.5745E+00	.6817E+00	.1162E+01	.1477E+01	.2259E+02
140	.1339E+01	.1862E+01	.3535E+02	.1001E+01	.5367E+00	.7374E+00	.1231E+01	.1438E+01	.2429E+02
200	.1433E+01	.1802E+01	.3764E+02	.1001E+01	.4997E+00	.7891E+00	.1295E+01	.1386E+01	.2586E+02
260	.1521E+01	.1727E+01	.3977E+02	.1001E+01	.4634E+00	.8377E+00	.1355E+01	.1323E+01	.2733E+02
320	.1605E+01	.1640E+01	.4178E+02	.1001E+01	.4278E+00	.8835E+00	.1412E+01	.1253E+01	.2871E+02
380	.1684E+01	.1545E+01	.4368E+02	.1001E+01	.3931E+00	.9272E+00	.1466E+01	.1177E+01	.3002E+02
440	.1759E+01	.1444E+01	.4549E+02	.1001E+01	.3595E+00	.9688E+00	.1517E+01	.1097E+01	.3126E+02
520	.1854E+01	.1303E+01	.4777E+02	.1001E+01	.3165E+00	.1022E+01	.1581E+01	.9876E+00	.3283E+02
600	.1943E+01	.1159E+01	.4994E+02	.1000E+01	.2756E+00	.1072E+01	.1642E+01	.8767E+00	.3432E+02

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--- MAT KR86   (360860) ENDF ID (1336)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6012E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6145E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6073E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2203E+02	.1001E+01	.6279E+00	.1982E+01	.1088E+01	.1907E+01	.2183E+02
20	.1128E+01	.1920E+01	.2275E+02	.1001E+01	.6141E+00	.2053E+01	.1127E+01	.1906E+01	.2254E+02
80	.1238E+01	.1902E+01	.2474E+02	.1001E+01	.5747E+00	.2254E+01	.1236E+01	.1888E+01	.2451E+02
140	.1339E+01	.1862E+01	.2655E+02	.1001E+01	.5369E+00	.2438E+01	.1336E+01	.1848E+01	.2630E+02
200	.1433E+01	.1802E+01	.2822E+02	.1001E+01	.4999E+00	.2609E+01	.1429E+01	.1789E+01	.2796E+02
260	.1521E+01	.1727E+01	.2977E+02	.1001E+01	.4636E+00	.2770E+01	.1516E+01	.1714E+01	.2950E+02
320	.1605E+01	.1640E+01	.3123E+02	.1001E+01	.4280E+00	.2921E+01	.1599E+01	.1628E+01	.3094E+02
380	.1684E+01	.1545E+01	.3261E+02	.1001E+01	.3933E+00	.3065E+01	.1677E+01	.1533E+01	.3231E+02
440	.1759E+01	.1443E+01	.3392E+02	.1001E+01	.3597E+00	.3203E+01	.1751E+01	.1433E+01	.3361E+02
520	.1854E+01	.1303E+01	.3557E+02	.1001E+01	.3166E+00	.3378E+01	.1845E+01	.1293E+01	.3525E+02
600	.1943E+01	.1159E+01	.3714E+02	.1001E+01	.2758E+00	.3545E+01	.1933E+01	.1150E+01	.3680E+02

--- MAT LA139   (571390) ENDF ID (9707)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1245E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8995E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2145E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1908E+01	.1154E+02	.1001E+01	.6226E+00	.9576E+00	.1052E+01	.1369E+01	.7104E+01
20	.1127E+01	.1907E+01	.1188E+02	.1001E+01	.6087E+00	.9925E+00	.1074E+01	.1363E+01	.7314E+01
80	.1237E+01	.1889E+01	.1281E+02	.1000E+01	.5692E+00	.1091E+01	.1138E+01	.1335E+01	.7895E+01
140	.1338E+01	.1848E+01	.1365E+02	.9998E+00	.5315E+00	.1182E+01	.1196E+01	.1296E+01	.8419E+01
200	.1431E+01	.1788E+01	.1441E+02	.9995E+00	.4947E+00	.1268E+01	.1250E+01	.1246E+01	.8898E+01
260	.1519E+01	.1713E+01	.1512E+02	.9991E+00	.4587E+00	.1348E+01	.1301E+01	.1187E+01	.9341E+01
320	.1602E+01	.1626E+01	.1577E+02	.9988E+00	.4234E+00	.1425E+01	.1349E+01	.1121E+01	.9755E+01
380	.1680E+01	.1531E+01	.1639E+02	.9984E+00	.3891E+00	.1498E+01	.1394E+01	.1052E+01	.1014E+02
440	.1755E+01	.1430E+01	.1697E+02	.9980E+00	.3559E+00	.1567E+01	.1437E+01	.9794E+00	.1051E+02
520	.1849E+01	.1290E+01	.1770E+02	.9973E+00	.3134E+00	.1655E+01	.1492E+01	.8804E+00	.1097E+02
600	.1937E+01	.1147E+01	.1839E+02	.9964E+00	.2731E+00	.1738E+01	.1543E+01	.7806E+00	.1140E+02

--- MAT LA140   (571400) ENDF ID (9708)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4930E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2700E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7630E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5304E+02	.1001E+01	.6277E+00	.2574E+02	.1058E+01	.1463E+01	.4338E+02
20	.1128E+01	.1920E+01	.5487E+02	.1001E+01	.6139E+00	.2667E+02	.1083E+01	.1458E+01	.4489E+02
80	.1238E+01	.1902E+01	.6000E+02	.1001E+01	.5745E+00	.2927E+02	.1154E+01	.1432E+01	.4912E+02
140	.1339E+01	.1862E+01	.6468E+02	.1001E+01	.5367E+00	.3166E+02	.1220E+01	.1393E+01	.5300E+02
200	.1433E+01	.1802E+01	.6903E+02	.1001E+01	.4997E+00	.3388E+02	.1280E+01	.1341E+01	.5659E+02
260	.1521E+01	.1727E+01	.7309E+02	.1001E+01	.4634E+00	.3597E+02	.1337E+01	.1280E+01	.5996E+02
320	.1605E+01	.1640E+01	.7693E+02	.1001E+01	.4278E+00	.3794E+02	.1391E+01	.1211E+01	.6313E+02
380	.1684E+01	.1545E+01	.8056E+02	.1001E+01	.3931E+00	.3981E+02	.1442E+01	.1137E+01	.6614E+02
440	.1759E+01	.1444E+01	.8403E+02	.1001E+01	.3595E+00	.4160E+02	.1491E+01	.1060E+01	.6901E+02
520	.1854E+01	.1303E+01	.8842E+02	.1001E+01	.3165E+00	.4387E+02	.1552E+01	.9538E+00	.7265E+02
600	.1943E+01	.1159E+01	.9258E+02	.1000E+01	.2756E+00	.4603E+02	.1609E+01	.8465E+00	.7611E+02

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--- MAT LI6 (30060) ENDF ID (1303)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7105E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3850E-01 BARNS			REACTION TYPE 105 IS (N,T) SIGMA ZERO .9359E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2218E+02	.1001E+01	.6277E+00	-.4573E-03	.1001E+01	.6276E+00	.1187E-02
20	.1128E+01	.1919E+01	.2290E+02	.1001E+01	.6139E+00	-.4842E-03	.1001E+01	.6139E+00	.1245E-02
80	.1238E+01	.1902E+01	.2490E+02	.1001E+01	.5744E+00	-.4644E-03	.1001E+01	.5744E+00	.1412E-02
140	.1339E+01	.1861E+01	.2673E+02	.1001E+01	.5367E+00	-.4910E-03	.1001E+01	.5366E+00	.1545E-02
200	.1433E+01	.1802E+01	.2841E+02	.1001E+01	.4997E+00	-.5045E-03	.1001E+01	.4997E+00	.1679E-02
260	.1521E+01	.1727E+01	.2997E+02	.1001E+01	.4634E+00	-.5342E-03	.1001E+01	.4633E+00	.1796E-02
320	.1605E+01	.1640E+01	.3145E+02	.1001E+01	.4278E+00	-.5798E-03	.1001E+01	.4277E+00	.1884E-02
380	.1684E+01	.1545E+01	.3284E+02	.1001E+01	.3931E+00	-.6052E-03	.1001E+01	.3931E+00	.1986E-02
440	.1759E+01	.1443E+01	.3416E+02	.1001E+01	.3595E+00	-.5983E-03	.1001E+01	.3595E+00	.2100E-02
520	.1854E+01	.1303E+01	.3582E+02	.1001E+01	.3165E+00	-.5217E-03	.1001E+01	.3165E+00	.2331E-02
600	.1943E+01	.1159E+01	.3740E+02	.1000E+01	.2756E+00	-.2664E-03	.1000E+01	.2756E+00	.2739E-02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .9366E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .9359E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1001E+01	.6286E+00	.1801E-01	.1001E+01	.6276E+00	.1187E-02
20	.1001E+01	.6149E+00	.1861E-01	.1001E+01	.6139E+00	.1245E-02
80	.1001E+01	.5754E+00	.2030E-01	.1001E+01	.5744E+00	.1412E-02
140	.1001E+01	.5376E+00	.2182E-01	.1001E+01	.5366E+00	.1545E-02
200	.1002E+01	.5007E+00	.2323E-01	.1001E+01	.4997E+00	.1679E-02
260	.1002E+01	.4643E+00	.2453E-01	.1001E+01	.4633E+00	.1795E-02
320	.1002E+01	.4287E+00	.2573E-01	.1001E+01	.4277E+00	.1884E-02
380	.1002E+01	.3939E+00	.2689E-01	.1001E+01	.3931E+00	.1986E-02
440	.1002E+01	.3603E+00	.2801E-01	.1001E+01	.3595E+00	.2100E-02
520	.1001E+01	.3172E+00	.2950E-01	.1001E+01	.3165E+00	.2331E-02
600	.1001E+01	.2763E+00	.3111E-01	.1000E+01	.2756E+00	.2739E-02

--- MAT LI7 (30070) ENDF ID (1272)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1050E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3603E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1086E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1825E+02	.9949E+00	.8551E+02	.9986E+02	.1086E+01	.4693E+01	.2096E+02
20	.1128E+01	.1920E+01	.1883E+02	.9956E+00	.8549E+02	.9985E+02	.1124E+01	.4692E+01	.2152E+02
80	.1238E+01	.1902E+01	.2044E+02	.9973E+00	.8469E+02	.9896E+02	.1230E+01	.4648E+01	.2304E+02
140	.1339E+01	.1862E+01	.2189E+02	.9986E+00	.8291E+02	.9690E+02	.1328E+01	.4550E+01	.2438E+02
200	.1433E+01	.1802E+01	.2324E+02	.9996E+00	.8026E+02	.9384E+02	.1419E+01	.4405E+01	.2558E+02
260	.1521E+01	.1727E+01	.2448E+02	.1000E+01	.7692E+02	.8995E+02	.1504E+01	.4222E+01	.2665E+02
320	.1604E+01	.1640E+01	.2565E+02	.1001E+01	.7305E+02	.8544E+02	.1584E+01	.4009E+01	.2764E+02
380	.1683E+01	.1545E+01	.2676E+02	.1002E+01	.6880E+02	.8048E+02	.1661E+01	.3776E+01	.2854E+02
440	.1759E+01	.1444E+01	.2780E+02	.1002E+01	.6429E+02	.7521E+02	.1734E+01	.3528E+01	.2938E+02
520	.1853E+01	.1303E+01	.2912E+02	.1002E+01	.5802E+02	.6789E+02	.1825E+01	.3185E+01	.3041E+02
600	.1942E+01	.1159E+01	.3037E+02	.1003E+01	.5162E+02	.6041E+02	.1911E+01	.2833E+01	.3137E+02

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--- MAT LU175 (711750) ENDF ID (1032)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5265E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2590E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3116E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1892E+01	.5314E+02	.9828E+00	.4682E+00	.2639E+02	.1000E+01	.7088E+00	.3091E+02
20	.1126E+01	.1891E+01	.5497E+02	.9775E+00	.4542E+00	.2735E+02	.1003E+01	.6969E+00	.3202E+02
80	.1235E+01	.1871E+01	.6011E+02	.9623E+00	.4162E+00	.3006E+02	.1008E+01	.6620E+00	.3513E+02
140	.1335E+01	.1829E+01	.6480E+02	.9483E+00	.3826E+00	.3254E+02	.1014E+01	.6271E+00	.3799E+02
200	.1428E+01	.1769E+01	.6916E+02	.9354E+00	.3518E+00	.3486E+02	.1019E+01	.5913E+00	.4065E+02
260	.1515E+01	.1694E+01	.7323E+02	.9234E+00	.3231E+00	.3703E+02	.1023E+01	.5547E+00	.4315E+02
320	.1597E+01	.1607E+01	.7707E+02	.9122E+00	.2960E+00	.3908E+02	.1028E+01	.5176E+00	.4550E+02
380	.1675E+01	.1513E+01	.8072E+02	.9018E+00	.2704E+00	.4104E+02	.1032E+01	.4803E+00	.4774E+02
440	.1749E+01	.1413E+01	.8419E+02	.8921E+00	.2461E+00	.4290E+02	.1037E+01	.4432E+00	.4988E+02
520	.1842E+01	.1274E+01	.8858E+02	.8799E+00	.2156E+00	.4527E+02	.1042E+01	.3944E+00	.5259E+02
600	.1929E+01	.1132E+01	.9276E+02	.8686E+00	.1872E+00	.4753E+02	.1048E+01	.3469E+00	.5517E+02

--- MAT MG-NAT (120000) ENDF ID (1312)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3337E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6300E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3400E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1928E+01	.2141E+02	.1002E+01	.6306E+00	.6473E-01	.1086E+01	.1904E+01	.2102E+02
20	.1127E+01	.1928E+01	.2210E+02	.1002E+01	.6168E+00	.6686E-01	.1124E+01	.1904E+01	.2170E+02
80	.1237E+01	.1911E+01	.2403E+02	.1002E+01	.5774E+00	.7278E-01	.1233E+01	.1886E+01	.2359E+02
140	.1339E+01	.1871E+01	.2578E+02	.1002E+01	.5395E+00	.7818E-01	.1333E+01	.1847E+01	.2530E+02
200	.1433E+01	.1812E+01	.2740E+02	.1003E+01	.5024E+00	.8316E-01	.1425E+01	.1788E+01	.2609E+02
260	.1522E+01	.1737E+01	.2890E+02	.1003E+01	.4660E+00	.8784E-01	.1512E+01	.1714E+01	.2836E+02
320	.1606E+01	.1650E+01	.3031E+02	.1003E+01	.4302E+00	.9220E-01	.1595E+01	.1628E+01	.2975E+02
380	.1685E+01	.1555E+01	.3164E+02	.1003E+01	.3954E+00	.9638E-01	.1673E+01	.1533E+01	.3106E+02
440	.1761E+01	.1453E+01	.3291E+02	.1003E+01	.3616E+00	.1004E+00	.1747E+01	.1433E+01	.3230E+02
520	.1857E+01	.1312E+01	.3451E+02	.1003E+01	.3184E+00	.1055E+00	.1841E+01	.1293E+01	.3387E+02
600	.1946E+01	.1167E+01	.3602E+02	.1003E+01	.2773E+00	.1106E+00	.1929E+01	.1151E+01	.3535E+02

--- MAT MN55 (250550) ENDF ID (1325)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1363E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1325E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1462E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1925E+01	.4835E+03	.1001E+01	.6283E+00	.6829E+00	.1009E+01	.7492E+00	.4571E+02
20	.1128E+01	.1925E+01	.5008E+03	.1001E+01	.6146E+00	.7075E+00	.1013E+01	.7367E+00	.4735E+02
80	.1239E+01	.1907E+01	.5495E+03	.1001E+01	.5751E+00	.7765E+00	.1023E+01	.6994E+00	.5195E+02
140	.1340E+01	.1867E+01	.5941E+03	.1001E+01	.5374E+00	.8398E+00	.1033E+01	.6614E+00	.5617E+02
200	.1434E+01	.1808E+01	.6356E+03	.1001E+01	.5004E+00	.8987E+00	.1042E+01	.6224E+00	.6010E+02
260	.1522E+01	.1733E+01	.6746E+03	.1001E+01	.4641E+00	.9540E+00	.1050E+01	.5824E+00	.6378E+02
320	.1606E+01	.1646E+01	.7114E+03	.1001E+01	.4284E+00	.1006E+01	.1058E+01	.5420E+00	.6725E+02
380	.1685E+01	.1551E+01	.7463E+03	.1001E+01	.3937E+00	.1056E+01	.1065E+01	.5016E+00	.7056E+02
440	.1761E+01	.1449E+01	.7797E+03	.1001E+01	.3601E+00	.1103E+01	.1072E+01	.4617E+00	.7371E+02
520	.1856E+01	.1308E+01	.8221E+03	.1001E+01	.3170E+00	.1163E+01	.1081E+01	.4095E+00	.7772E+02
600	.1945E+01	.1164E+01	.8624E+03	.1001E+01	.2761E+00	.1221E+01	.1089E+01	.3589E+00	.8153E+02

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--- MAT MO-NAT   (420000) ENDF ID (1321)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5000E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2650E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7650E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2838E+02	.1001E+01	.6277E+00	.1143E+02	.1058E+01	.1472E+01	.2251E+02
20	.1128E+01	.1920E+01	.2932E+02	.1001E+01	.6139E+00	.1184E+02	.1084E+01	.1467E+01	.2327E+02
80	.1238E+01	.1902E+01	.3196E+02	.1001E+01	.5745E+00	.1300E+02	.1156E+01	.1442E+01	.2539E+02
140	.1339E+01	.1862E+01	.3435E+02	.1001E+01	.5367E+00	.1406E+02	.1222E+01	.1403E+01	.2733E+02
200	.1433E+01	.1802E+01	.3657E+02	.1001E+01	.4997E+00	.1505E+02	.1284E+01	.1351E+01	.2912E+02
260	.1521E+01	.1727E+01	.3864E+02	.1001E+01	.4634E+00	.1597E+02	.1341E+01	.1289E+01	.3079E+02
320	.1605E+01	.1640E+01	.4058E+02	.1001E+01	.4278E+00	.1685E+02	.1396E+01	.1220E+01	.3236E+02
380	.1684E+01	.1545E+01	.4243E+02	.1001E+01	.3931E+00	.1768E+02	.1447E+01	.1146E+01	.3385E+02
440	.1759E+01	.1444E+01	.4415E+02	.1001E+01	.3595E+00	.1848E+02	.1496E+01	.1068E+01	.3527E+02
520	.1854E+01	.1303E+01	.4639E+02	.1001E+01	.3165E+00	.1949E+02	.1558E+01	.9612E+00	.3707E+02
600	.1943E+01	.1159E+01	.4849E+02	.1000E+01	.2756E+00	.2044E+02	.1616E+01	.8531E+00	.3877E+02

--- MAT MO92   (420920) ENDF ID (9278)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4662E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4473E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4707E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2038E+02	.9386E+00	.4328E+00	.2096E+02	.1087E+01	.1906E+01	.2039E+02
20	.1128E+01	.1920E+01	.2104E+02	.9321E+00	.4202E+00	.2173E+02	.1126E+01	.1905E+01	.2104E+02
80	.1238E+01	.1902E+01	.2286E+02	.9137E+00	.3860E+00	.2389E+02	.1235E+01	.1887E+01	.2287E+02
140	.1339E+01	.1862E+01	.2452E+02	.8971E+00	.3553E+00	.2588E+02	.1335E+01	.1847E+01	.2453E+02
200	.1433E+01	.1802E+01	.2604E+02	.8822E+00	.3269E+00	.2773E+02	.1428E+01	.1788E+01	.2606E+02
260	.1521E+01	.1727E+01	.2746E+02	.8686E+00	.3002E+00	.2946E+02	.1515E+01	.1714E+01	.2748E+02
320	.1605E+01	.1640E+01	.2879E+02	.8563E+00	.2748E+00	.3110E+02	.1598E+01	.1627E+01	.2882E+02
380	.1684E+01	.1545E+01	.3005E+02	.8451E+00	.2508E+00	.3266E+02	.1676E+01	.1532E+01	.3008E+02
440	.1759E+01	.1443E+01	.3125E+02	.8348E+00	.2279E+00	.3415E+02	.1750E+01	.1432E+01	.3128E+02
520	.1854E+01	.1303E+01	.3276E+02	.8223E+00	.1993E+00	.3604E+02	.1844E+01	.1292E+01	.3279E+02
600	.1943E+01	.1159E+01	.3418E+02	.8108E+00	.1725E+00	.3783E+02	.1932E+01	.1150E+01	.3422E+02

--- MAT MO94   (420940) ENDF ID (9281)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3568E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1598E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3584E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2413E+02	.1001E+01	.6280E+00	.7065E+02	.1088E+01	.1914E+01	.2434E+02
20	.1128E+01	.1920E+01	.2492E+02	.1001E+01	.6142E+00	.7319E+02	.1128E+01	.1914E+01	.2514E+02
80	.1238E+01	.1902E+01	.2713E+02	.1001E+01	.5748E+00	.8033E+02	.1237E+01	.1896E+01	.2736E+02
140	.1339E+01	.1862E+01	.2913E+02	.1001E+01	.5370E+00	.8689E+02	.1338E+01	.1856E+01	.2939E+02
200	.1433E+01	.1802E+01	.3098E+02	.1002E+01	.5000E+00	.9299E+02	.1431E+01	.1796E+01	.3126E+02
260	.1521E+01	.1727E+01	.3270E+02	.1002E+01	.4637E+00	.9871E+02	.1519E+01	.1722E+01	.3300E+02
320	.1605E+01	.1640E+01	.3432E+02	.1001E+01	.4281E+00	.1041E+03	.1602E+01	.1635E+01	.3464E+02
380	.1684E+01	.1545E+01	.3586E+02	.1001E+01	.3934E+00	.1093E+03	.1681E+01	.1540E+01	.3618E+02
440	.1759E+01	.1443E+01	.3731E+02	.1001E+01	.3598E+00	.1142E+03	.1756E+01	.1439E+01	.3766E+02
520	.1854E+01	.1303E+01	.3915E+02	.1001E+01	.3167E+00	.1204E+03	.1850E+01	.1298E+01	.3952E+02
600	.1943E+01	.1159E+01	.4089E+02	.1001E+01	.2758E+00	.1263E+03	.1938E+01	.1155E+01	.4127E+02

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--- MAT MO95   (420950) ENDF ID (9282)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2456E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1447E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1693E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1916E+01	.8696E+02	.1001E+01	.6298E+00	.8026E+01	.1014E+01	.8164E+00	.1948E+02
20	.1128E+01	.1916E+01	.9000E+02	.1001E+01	.6161E+00	.8315E+01	.1020E+01	.8046E+00	.2017E+02
80	.1238E+01	.1897E+01	.9856E+02	.1002E+01	.5767E+00	.9126E+01	.1036E+01	.7684E+00	.2210E+02
140	.1339E+01	.1857E+01	.1064E+03	.1002E+01	.5390E+00	.9871E+01	.1051E+01	.7303E+00	.2388E+02
200	.1433E+01	.1798E+01	.1137E+03	.1002E+01	.5020E+00	.1056E+02	.1064E+01	.6900E+00	.2553E+02
260	.1521E+01	.1723E+01	.1205E+03	.1002E+01	.4657E+00	.1121E+02	.1077E+01	.6481E+00	.2707E+02
320	.1604E+01	.1636E+01	.1269E+03	.1002E+01	.4300E+00	.1183E+02	.1089E+01	.6050E+00	.2853E+02
380	.1683E+01	.1540E+01	.1330E+03	.1002E+01	.3953E+00	.1241E+02	.1101E+01	.5614E+00	.2991E+02
440	.1758E+01	.1439E+01	.1388E+03	.1002E+01	.3616E+00	.1297E+02	.1112E+01	.5179E+00	.3123E+02
520	.1852E+01	.1299E+01	.1462E+03	.1002E+01	.3184E+00	.1368E+02	.1125E+01	.4607E+00	.3291E+02
600	.1941E+01	.1155E+01	.1532E+03	.1002E+01	.2774E+00	.1435E+02	.1138E+01	.4048E+00	.3450E+02

--- MAT MO96   (420960) ENDF ID (9283)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2930E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1000E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3930E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.4877E+02	.1001E+01	.6290E+00	.2090E+02	.1067E+01	.1591E+01	.4168E+02
20	.1128E+01	.1919E+01	.5045E+02	.1001E+01	.6153E+00	.2165E+02	.1096E+01	.1587E+01	.4312E+02
80	.1238E+01	.1901E+01	.5514E+02	.1001E+01	.5759E+00	.2377E+02	.1178E+01	.1564E+01	.4716E+02
140	.1339E+01	.1861E+01	.5943E+02	.1001E+01	.5382E+00	.2571E+02	.1253E+01	.1524E+01	.5085E+02
200	.1433E+01	.1801E+01	.6341E+02	.1002E+01	.5012E+00	.2751E+02	.1323E+01	.1471E+01	.5427E+02
260	.1521E+01	.1726E+01	.6713E+02	.1002E+01	.4649E+00	.2920E+02	.1389E+01	.1405E+01	.5748E+02
320	.1605E+01	.1639E+01	.7064E+02	.1002E+01	.4292E+00	.3080E+02	.1451E+01	.1331E+01	.6050E+02
380	.1684E+01	.1544E+01	.7396E+02	.1002E+01	.3945E+00	.3232E+02	.1510E+01	.1251E+01	.6337E+02
440	.1759E+01	.1443E+01	.7713E+02	.1002E+01	.3608E+00	.3378E+02	.1566E+01	.1167E+01	.6610E+02
520	.1854E+01	.1302E+01	.8114E+02	.1002E+01	.3177E+00	.3562E+02	.1637E+01	.1052E+01	.6956E+02
600	.1942E+01	.1158E+01	.8495E+02	.1001E+01	.2767E+00	.3737E+02	.1703E+01	.9340E+00	.7284E+02

--- MAT MO97   (420970) ENDF ID (9284)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3554E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2174E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5727E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2651E+02	.1001E+01	.6279E+00	.7808E+01	.1056E+01	.1430E+01	.1941E+02
20	.1128E+01	.1919E+01	.2738E+02	.1001E+01	.6141E+00	.8089E+01	.1080E+01	.1424E+01	.2006E+02
80	.1238E+01	.1901E+01	.2982E+02	.1001E+01	.5747E+00	.8878E+01	.1148E+01	.1398E+01	.2187E+02
140	.1339E+01	.1861E+01	.3205E+02	.1001E+01	.5369E+00	.9603E+01	.1211E+01	.1359E+01	.2353E+02
200	.1433E+01	.1802E+01	.3410E+02	.1001E+01	.5000E+00	.1028E+02	.1269E+01	.1308E+01	.2506E+02
260	.1521E+01	.1727E+01	.3602E+02	.1001E+01	.4636E+00	.1091E+02	.1324E+01	.1248E+01	.2649E+02
320	.1605E+01	.1640E+01	.3782E+02	.1001E+01	.4280E+00	.1151E+02	.1376E+01	.1180E+01	.2783E+02
380	.1684E+01	.1545E+01	.3953E+02	.1001E+01	.3934E+00	.1208E+02	.1425E+01	.1108E+01	.2911E+02
440	.1759E+01	.1443E+01	.4115E+02	.1001E+01	.3597E+00	.1262E+02	.1471E+01	.1032E+01	.3032E+02
520	.1854E+01	.1303E+01	.4320E+02	.1001E+01	.3167E+00	.1331E+02	.1530E+01	.9285E+00	.3185E+02
600	.1943E+01	.1159E+01	.4514E+02	.1001E+01	.2758E+00	.1396E+02	.1585E+01	.8238E+00	.3330E+02

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--- MAT MO98   (420980) ENDF ID (9285)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3538E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1272E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3665E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2791E+02	.1002E+01	.6341E+00	.5846E+02	.1086E+01	.1875E+01	.2897E+02
20	.1128E+01	.1920E+01	.2884E+02	.1002E+01	.6205E+00	.6056E+02	.1124E+01	.1874E+01	.2994E+02
80	.1238E+01	.1902E+01	.3142E+02	.1002E+01	.5814E+00	.6648E+02	.1230E+01	.1856E+01	.3264E+02
140	.1339E+01	.1862E+01	.3378E+02	.1002E+01	.5438E+00	.7190E+02	.1328E+01	.1816E+01	.3510E+02
200	.1433E+01	.1802E+01	.3595E+02	.1003E+01	.5069E+00	.7695E+02	.1418E+01	.1757E+01	.3737E+02
260	.1521E+01	.1727E+01	.3798E+02	.1003E+01	.4705E+00	.8168E+02	.1503E+01	.1684E+01	.3950E+02
320	.1605E+01	.1640E+01	.3989E+02	.1003E+01	.4347E+00	.8616E+02	.1584E+01	.1598E+01	.4150E+02
380	.1684E+01	.1545E+01	.4170E+02	.1004E+01	.3998E+00	.9041E+02	.1660E+01	.1505E+01	.4339E+02
440	.1759E+01	.1443E+01	.4342E+02	.1004E+01	.3659E+00	.9447E+02	.1733E+01	.1406E+01	.4519E+02
520	.1854E+01	.1303E+01	.4559E+02	.1004E+01	.3225E+00	.9963E+02	.1824E+01	.1269E+01	.4746E+02
600	.1943E+01	.1159E+01	.4765E+02	.1004E+01	.2811E+00	.1045E+03	.1910E+01	.1129E+01	.4962E+02

--- MAT MO99   (420990) ENDF ID (9286)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3912E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1700E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5612E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2389E+02	.1001E+01	.6277E+00	.1698E+02	.1062E+01	.1529E+01	.2180E+02
20	.1128E+01	.1920E+01	.2467E+02	.1001E+01	.6139E+00	.1759E+02	.1090E+01	.1524E+01	.2252E+02
80	.1238E+01	.1902E+01	.2684E+02	.1001E+01	.5745E+00	.1931E+02	.1166E+01	.1500E+01	.2456E+02
140	.1339E+01	.1862E+01	.2863E+02	.1001E+01	.5367E+00	.2089E+02	.1237E+01	.1460E+01	.2642E+02
200	.1433E+01	.1802E+01	.3065E+02	.1001E+01	.4997E+00	.2235E+02	.1302E+01	.1408E+01	.2814E+02
260	.1521E+01	.1727E+01	.3236E+02	.1001E+01	.4634E+00	.2373E+02	.1364E+01	.1344E+01	.2975E+02
320	.1605E+01	.1640E+01	.3396E+02	.1001E+01	.4278E+00	.2503E+02	.1422E+01	.1273E+01	.3126E+02
380	.1684E+01	.1545E+01	.3547E+02	.1001E+01	.3931E+00	.2627E+02	.1477E+01	.1196E+01	.3268E+02
440	.1759E+01	.1444E+01	.3691E+02	.1001E+01	.3595E+00	.2745E+02	.1529E+01	.1115E+01	.3405E+02
520	.1854E+01	.1303E+01	.3873E+02	.1001E+01	.3165E+00	.2894E+02	.1595E+01	.1004E+01	.3577E+02
600	.1943E+01	.1159E+01	.4045E+02	.1000E+01	.2757E+00	.3037E+02	.1657E+01	.8915E+00	.3740E+02

--- MAT MO100   (421000) ENDF ID (9287)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3469E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1989E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3668E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3301E+02	.1001E+01	.6280E+00	.2071E+02	.1084E+01	.1850E+01	.3235E+02
20	.1128E+01	.1919E+01	.3412E+02	.1001E+01	.6143E+00	.2145E+02	.1121E+01	.1849E+01	.3343E+02
80	.1238E+01	.1901E+01	.3722E+02	.1001E+01	.5749E+00	.2355E+02	.1225E+01	.1830E+01	.3648E+02
140	.1339E+01	.1861E+01	.4005E+02	.1001E+01	.5371E+00	.2547E+02	.1321E+01	.1790E+01	.3926E+02
200	.1433E+01	.1802E+01	.4267E+02	.1001E+01	.5001E+00	.2726E+02	.1410E+01	.1732E+01	.4183E+02
260	.1521E+01	.1727E+01	.4511E+02	.1001E+01	.4638E+00	.2893E+02	.1493E+01	.1659E+01	.4423E+02
320	.1605E+01	.1640E+01	.4741E+02	.1001E+01	.4282E+00	.3052E+02	.1572E+01	.1574E+01	.4649E+02
380	.1684E+01	.1545E+01	.4959E+02	.1001E+01	.3935E+00	.3202E+02	.1647E+01	.1482E+01	.4863E+02
440	.1759E+01	.1443E+01	.5166E+02	.1001E+01	.3599E+00	.3346E+02	.1718E+01	.1385E+01	.5067E+02
520	.1854E+01	.1303E+01	.5428E+02	.1001E+01	.3168E+00	.3529E+02	.1808E+01	.1249E+01	.5325E+02
600	.1943E+01	.1159E+01	.5677E+02	.1001E+01	.2760E+00	.3703E+02	.1892E+01	.1111E+01	.5570E+02

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--- MAT NA23   (110230) ENDF ID (1311)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3319E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5280E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3847E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1882E+01	.4210E+02	.1001E+01	.6277E+00	.1610E+00	.1075E+01	.1710E+01	.3634E+02
20	.1126E+01	.1881E+01	.4353E+02	.1001E+01	.6140E+00	.1668E+00	.1108E+01	.1707E+01	.3758E+02
80	.1233E+01	.1861E+01	.4756E+02	.1001E+01	.5746E+00	.1832E+00	.1202E+01	.1685E+01	.4106E+02
140	.1332E+01	.1820E+01	.5123E+02	.1001E+01	.5368E+00	.1982E+00	.1287E+01	.1644E+01	.4423E+02
200	.1424E+01	.1761E+01	.5464E+02	.1001E+01	.4998E+00	.2121E+00	.1366E+01	.1588E+01	.4717E+02
260	.1510E+01	.1687E+01	.5782E+02	.1001E+01	.4635E+00	.2252E+00	.1440E+01	.1519E+01	.4992E+02
320	.1591E+01	.1601E+01	.6083E+02	.1001E+01	.4279E+00	.2375E+00	.1510E+01	.1440E+01	.5251E+02
380	.1668E+01	.1507E+01	.6367E+02	.1001E+01	.3932E+00	.2492E+00	.1576E+01	.1354E+01	.5497E+02
440	.1741E+01	.1408E+01	.6638E+02	.1001E+01	.3596E+00	.2604E+00	.1639E+01	.1264E+01	.5731E+02
520	.1833E+01	.1270E+01	.6981E+02	.1001E+01	.3166E+00	.2747E+00	.1719E+01	.1139E+01	.6027E+02
600	.1919E+01	.1130E+01	.7307E+02	.1000E+01	.2757E+00	.2885E+00	.1793E+01	.1012E+01	.6308E+02

--- MAT NB93   (410930) ENDF ID (1189)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5664E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1150E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6814E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1971E+02	.1001E+01	.6278E+00	.8429E+01	.1074E+01	.1702E+01	.1781E+02
20	.1128E+01	.1920E+01	.2034E+02	.1001E+01	.6140E+00	.8732E+01	.1107E+01	.1699E+01	.1838E+02
80	.1238E+01	.1902E+01	.2210E+02	.1001E+01	.5746E+00	.9584E+01	.1198E+01	.1678E+01	.1999E+02
140	.1339E+01	.1862E+01	.2369E+02	.1001E+01	.5368E+00	.1037E+02	.1282E+01	.1638E+01	.2144E+02
200	.1433E+01	.1802E+01	.2516E+02	.1001E+01	.4998E+00	.1109E+02	.1360E+01	.1582E+01	.2279E+02
260	.1521E+01	.1727E+01	.2653E+02	.1001E+01	.4635E+00	.1178E+02	.1434E+01	.1514E+01	.2404E+02
320	.1605E+01	.1640E+01	.2781E+02	.1001E+01	.4279E+00	.1242E+02	.1503E+01	.1436E+01	.2521E+02
380	.1684E+01	.1545E+01	.2902E+02	.1001E+01	.3932E+00	.1304E+02	.1569E+01	.1350E+01	.2632E+02
440	.1759E+01	.1443E+01	.3017E+02	.1001E+01	.3596E+00	.1362E+02	.1631E+01	.1261E+01	.2738E+02
520	.1854E+01	.1303E+01	.3162E+02	.1001E+01	.3166E+00	.1437E+02	.1710E+01	.1136E+01	.2871E+02
600	.1943E+01	.1159E+01	.3299E+02	.1000E+01	.2757E+00	.1507E+02	.1784E+01	.1010E+01	.2996E+02

--- MAT NB94   (410940) ENDF ID (9251)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3538E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1360E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1714E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.3324E+02	.1002E+01	.6360E+00	.8894E+01	.1020E+01	.9004E+00	.1392E+02
20	.1128E+01	.1917E+01	.3435E+02	.1002E+01	.6224E+00	.9214E+01	.1028E+01	.8896E+00	.1440E+02
80	.1238E+01	.1898E+01	.3748E+02	.1002E+01	.5834E+00	.1011E+02	.1051E+01	.8549E+00	.1576E+02
140	.1339E+01	.1858E+01	.4033E+02	.1003E+01	.5458E+00	.1094E+02	.1072E+01	.8168E+00	.1700E+02
200	.1433E+01	.1799E+01	.4296E+02	.1003E+01	.5090E+00	.1170E+02	.1092E+01	.7752E+00	.1816E+02
260	.1521E+01	.1724E+01	.4542E+02	.1004E+01	.4726E+00	.1242E+02	.1110E+01	.7308E+00	.1924E+02
320	.1604E+01	.1637E+01	.4774E+02	.1004E+01	.4368E+00	.1310E+02	.1128E+01	.6845E+00	.2025E+02
380	.1683E+01	.1541E+01	.4993E+02	.1004E+01	.4018E+00	.1375E+02	.1145E+01	.6370E+00	.2122E+02
440	.1758E+01	.1440E+01	.5202E+02	.1005E+01	.3678E+00	.1437E+02	.1160E+01	.5892E+00	.2214E+02
520	.1853E+01	.1300E+01	.5467E+02	.1005E+01	.3242E+00	.1515E+02	.1180E+01	.5256E+00	.2331E+02
600	.1941E+01	.1156E+01	.5717E+02	.1005E+01	.2827E+00	.1590E+02	.1199E+01	.4630E+00	.2442E+02

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--- MAT NB95 (410950) ENDF ID (9253)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3806E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1500E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5306E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2739E+02	.1001E+01	.6277E+00	.1536E+02	.1064E+01	.1555E+01	.2398E+02
20	.1128E+01	.1920E+01	.2829E+02	.1001E+01	.6139E+00	.1591E+02	.1092E+01	.1550E+01	.2479E+02
80	.1238E+01	.1902E+01	.3082E+02	.1001E+01	.5745E+00	.1746E+02	.1171E+01	.1526E+01	.2705E+02
140	.1339E+01	.1862E+01	.3313E+02	.1001E+01	.5367E+00	.1889E+02	.1244E+01	.1487E+01	.2910E+02
200	.1433E+01	.1802E+01	.3526E+02	.1001E+01	.4997E+00	.2021E+02	.1311E+01	.1434E+01	.3101E+02
260	.1521E+01	.1727E+01	.3725E+02	.1001E+01	.4634E+00	.2146E+02	.1374E+01	.1370E+01	.3278E+02
320	.1605E+01	.1640E+01	.3912E+02	.1001E+01	.4278E+00	.2263E+02	.1434E+01	.1297E+01	.3446E+02
380	.1684E+01	.1545E+01	.4088E+02	.1001E+01	.3931E+00	.2375E+02	.1491E+01	.1219E+01	.3604E+02
440	.1759E+01	.1444E+01	.4257E+02	.1001E+01	.3595E+00	.2482E+02	.1545E+01	.1137E+01	.3755E+02
520	.1854E+01	.1303E+01	.4469E+02	.1001E+01	.3165E+00	.2617E+02	.1613E+01	.1024E+01	.3946E+02
600	.1943E+01	.1159E+01	.4671E+02	.1000E+01	.2756E+00	.2746E+02	.1676E+01	.9093E+00	.4127E+02

--- MAT ND142 (601420) ENDF ID (9763)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4568E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1870E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2327E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2191E+02	.1001E+01	.6277E+00	.2663E-01	.1018E+01	.8814E+00	.4323E+01
20	.1128E+01	.1920E+01	.2262E+02	.1001E+01	.6139E+00	.2760E-01	.1026E+01	.8702E+00	.4463E+01
80	.1238E+01	.1902E+01	.2460E+02	.1001E+01	.5745E+00	.3035E-01	.1048E+01	.8350E+00	.4854E+01
140	.1339E+01	.1862E+01	.2640E+02	.1001E+01	.5367E+00	.3284E-01	.1068E+01	.7968E+00	.5209E+01
200	.1433E+01	.1802E+01	.2806E+02	.1001E+01	.4997E+00	.3515E-01	.1086E+01	.7554E+00	.5536E+01
260	.1521E+01	.1727E+01	.2960E+02	.1001E+01	.4634E+00	.3730E-01	.1103E+01	.7115E+00	.5841E+01
320	.1605E+01	.1640E+01	.3105E+02	.1001E+01	.4278E+00	.3933E-01	.1120E+01	.6658E+00	.6127E+01
380	.1684E+01	.1545E+01	.3242E+02	.1001E+01	.3931E+00	.4127E-01	.1135E+01	.6192E+00	.6398E+01
440	.1759E+01	.1443E+01	.3372E+02	.1001E+01	.3595E+00	.4314E-01	.1150E+01	.5723E+00	.6655E+01
520	.1854E+01	.1303E+01	.3537E+02	.1001E+01	.3165E+00	.4560E-01	.1168E+01	.5101E+00	.6980E+01
600	.1943E+01	.1159E+01	.3692E+02	.1000E+01	.2756E+00	.4812E-01	.1185E+01	.4491E+00	.7287E+01

--- MAT ND143 (601430) ENDF ID (9764)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6890E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3251E+03 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1914E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1082E+01	.1789E+01	.1133E+02	.9981E+00	.5855E+00	-.8871E-01	.1136E+01	.2467E+01	.3637E+02
20	.1120E+01	.1784E+01	.1166E+02	.9973E+00	.5709E+00	-.9035E-01	.1187E+01	.2476E+01	.3758E+02
80	.1226E+01	.1756E+01	.1257E+02	.9949E+00	.5296E+00	-.9438E-01	.1331E+01	.2477E+01	.4094E+02
140	.1322E+01	.1708E+01	.1339E+02	.9925E+00	.4909E+00	-.9732E-01	.1466E+01	.2444E+01	.4401E+02
200	.1411E+01	.1645E+01	.1415E+02	.9901E+00	.4538E+00	-.9945E-01	.1593E+01	.2383E+01	.4683E+02
260	.1494E+01	.1568E+01	.1484E+02	.9877E+00	.4181E+00	-.1009E+00	.1713E+01	.2296E+01	.4947E+02
320	.1571E+01	.1482E+01	.1549E+02	.9854E+00	.3837E+00	-.1018E+00	.1828E+01	.2191E+01	.5194E+02
380	.1644E+01	.1390E+01	.1610E+02	.9830E+00	.3508E+00	-.1022E+00	.1938E+01	.2072E+01	.5428E+02
440	.1713E+01	.1294E+01	.1668E+02	.9806E+00	.3192E+00	-.1021E+00	.2044E+01	.1944E+01	.5650E+02
520	.1799E+01	.1162E+01	.1741E+02	.9773E+00	.2793E+00	-.1014E+00	.2178E+01	.1762E+01	.5931E+02
600	.1878E+01	.1030E+01	.1809E+02	.9739E+00	.2420E+00	-.9992E-01	.2305E+01	.1573E+01	.6196E+02

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3940E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .3251E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1013E+01	.7960E+00	.1908E+01	.9981E+00	.5855E+00	-.8870E-01
20	.1019E+01	.7831E+00	.1964E+01	.9973E+00	.5709E+00	-.9035E-01
80	.1035E+01	.7441E+00	.2121E+01	.9949E+00	.5296E+00	-.9437E-01
140	.1050E+01	.7038E+00	.2262E+01	.9925E+00	.4909E+00	-.9732E-01
200	.1064E+01	.6621E+00	.2392E+01	.9901E+00	.4538E+00	-.9945E-01
260	.1076E+01	.6193E+00	.2512E+01	.9877E+00	.4181E+00	-.1009E+00
320	.1088E+01	.5759E+00	.2625E+01	.9854E+00	.3837E+00	-.1018E+00
380	.1099E+01	.5325E+00	.2732E+01	.9830E+00	.3508E+00	-.1022E+00
440	.1109E+01	.4897E+00	.2833E+01	.9806E+00	.3192E+00	-.1021E+00
520	.1121E+01	.4338E+00	.2961E+01	.9773E+00	.2793E+00	-.1013E+00
600	.1132E+01	.3797E+00	.3082E+01	.9739E+00	.2420E+00	-.9992E-01

--- MAT ND144 (601440) ENDF ID (9765)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .9999E-04 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3601E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3601E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1920E+01	.7002E+07	.1001E+01	.6281E+00	.1155E+01	.1001E+01	.6281E+00	.1956E+03
20	.1128E+01	.1920E+01	.7254E+07	.1001E+01	.6143E+00	.1196E+01	.1001E+01	.6144E+00	.2026E+03
80	.1238E+01	.1902E+01	.7962E+07	.1001E+01	.5750E+00	.1313E+01	.1001E+01	.5750E+00	.2224E+03
140	.1339E+01	.1862E+01	.8612E+07	.1001E+01	.5372E+00	.1420E+01	.1001E+01	.5372E+00	.2406E+03
200	.1433E+01	.1802E+01	.9216E+07	.1001E+01	.5002E+00	.1520E+01	.1001E+01	.5002E+00	.2575E+03
260	.1521E+01	.1727E+01	.9783E+07	.1001E+01	.4639E+00	.1613E+01	.1001E+01	.4639E+00	.2733E+03
320	.1605E+01	.1640E+01	.1032E+08	.1001E+01	.4282E+00	.1701E+01	.1001E+01	.4283E+00	.2883E+03
380	.1684E+01	.1545E+01	.1083E+08	.1001E+01	.3936E+00	.1785E+01	.1001E+01	.3936E+00	.3025E+03
440	.1759E+01	.1444E+01	.1132E+08	.1001E+01	.3599E+00	.1866E+01	.1001E+01	.3600E+00	.3161E+03
520	.1854E+01	.1303E+01	.1193E+08	.1001E+01	.3169E+00	.1967E+01	.1001E+01	.3169E+00	.3333E+03
600	.1943E+01	.1159E+01	.1252E+08	.1001E+01	.2760E+00	.2065E+01	.1001E+01	.2760E+00	.3498E+03

--- MAT ND145 (601450) ENDF ID (9766)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8918E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4200E+02 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1395E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1869E+01	.7036E+03	.1002E+01	.6339E+00	.5543E+01	.1136E+01	.2467E+01	.3634E+02
20	.1125E+01	.1867E+01	.7288E+03	.1002E+01	.6203E+00	.5742E+01	.1187E+01	.2475E+01	.3755E+02
80	.1234E+01	.1845E+01	.7997E+03	.1002E+01	.5812E+00	.6302E+01	.1331E+01	.2476E+01	.4091E+02
140	.1333E+01	.1801E+01	.8648E+03	.1002E+01	.5436E+00	.6816E+01	.1466E+01	.2444E+01	.4397E+02
200	.1425E+01	.1740E+01	.9253E+03	.1003E+01	.5067E+00	.7294E+01	.1593E+01	.2382E+01	.4680E+02
260	.1512E+01	.1664E+01	.9821E+03	.1003E+01	.4704E+00	.7742E+01	.1713E+01	.2296E+01	.4943E+02
320	.1593E+01	.1577E+01	.1036E+04	.1003E+01	.4346E+00	.8166E+01	.1828E+01	.2191E+01	.5190E+02
380	.1669E+01	.1483E+01	.1087E+04	.1004E+01	.3998E+00	.8569E+01	.1938E+01	.2072E+01	.5424E+02
440	.1742E+01	.1383E+01	.1135E+04	.1004E+01	.3659E+00	.8953E+01	.2044E+01	.1943E+01	.5646E+02
520	.1834E+01	.1246E+01	.1197E+04	.1004E+01	.3224E+00	.9442E+01	.2178E+01	.1761E+01	.5926E+02
600	.1919E+01	.1106E+01	.1256E+04	.1004E+01	.2811E+00	.9906E+01	.2305E+01	.1573E+01	.6191E+02

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .4289E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .4200E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1003E+01	.6595E+00	.2006E+02	.1002E+01	.6339E+00	.5543E+01
20	.1004E+01	.6462E+00	.20788E+02	.1002E+01	.6203E+00	.5742E+01
80	.1007E+01	.6075E+00	.2280E+02	.1002E+01	.5812E+00	.6302E+01
140	.1009E+01	.5698E+00	.2465E+02	.1002E+01	.5436E+00	.6816E+01
200	.1011E+01	.5324E+00	.2638E+02	.1003E+01	.5067E+00	.7294E+01
260	.1014E+01	.4952E+00	.2800E+02	.1003E+01	.4704E+00	.7742E+01
320	.1016E+01	.4584E+00	.2953E+02	.1003E+01	.4346E+00	.8166E+01
380	.1017E+01	.4223E+00	.3098E+02	.1004E+01	.3998E+00	.8569E+01
440	.1019E+01	.3871E+00	.3237E+02	.1004E+01	.3659E+00	.8953E+01
520	.1021E+01	.3416E+00	.3414E+02	.1004E+01	.3224E+00	.9442E+01
600	.1023E+01	.2982E+00	.3581E+02	.1004E+01	.2811E+00	.9906E+01

--- MAT ND146   (601460) ENDF ID (9767)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1698E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1400E+01 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1196E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.1210E+03	.1001E+01	.6277E+00	.1850E+01	.1136E+01	.2464E+01	.3624E+02
20	.1128E+01	.1919E+01	.1253E+03	.1001E+01	.6139E+00	.1916E+01	.1186E+01	.2472E+01	.3745E+02
80	.1238E+01	.1901E+01	.1373E+03	.1001E+01	.5745E+00	.2104E+01	.1331E+01	.2473E+01	.4080E+02
140	.1339E+01	.1861E+01	.1483E+03	.1001E+01	.5367E+00	.2275E+01	.1465E+01	.2441E+01	.4385E+02
200	.1433E+01	.1802E+01	.1585E+03	.1001E+01	.4997E+00	.2435E+01	.1592E+01	.2379E+01	.4667E+02
260	.1521E+01	.1727E+01	.1680E+03	.1001E+01	.4634E+00	.2585E+01	.1712E+01	.2293E+01	.4929E+02
320	.1605E+01	.1639E+01	.1771E+03	.1001E+01	.4278E+00	.2726E+01	.1827E+01	.2188E+01	.5176E+02
380	.1684E+01	.1544E+01	.1856E+03	.1001E+01	.3931E+00	.2861E+01	.1937E+01	.2069E+01	.5409E+02
440	.1759E+01	.1443E+01	.1938E+03	.1001E+01	.3595E+00	.2990E+01	.2042E+01	.1941E+01	.5630E+02
520	.1854E+01	.1302E+01	.2042E+03	.1001E+01	.3165E+00	.3153E+01	.2176E+01	.1759E+01	.5910E+02
600	.1942E+01	.1158E+01	.2141E+03	.1000E+01	.2757E+00	.3308E+01	.2303E+01	.1571E+01	.6174E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3098E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1400E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1049E+01	.1336E+01	.6715E+02	.1001E+01	.6277E+00	.1850E+01
20	.1071E+01	.1329E+01	.6953E+02	.1001E+01	.6140E+00	.1917E+01
80	.1131E+01	.1302E+01	.7619E+02	.1001E+01	.5745E+00	.2104E+01
140	.1186E+01	.1263E+01	.8229E+02	.1001E+01	.5367E+00	.2276E+01
200	.1238E+01	.1213E+01	.8796E+02	.1001E+01	.4998E+00	.2435E+01
260	.1286E+01	.1156E+01	.9327E+02	.1001E+01	.4634E+00	.2585E+01
320	.1332E+01	.1092E+01	.9829E+02	.1001E+01	.4278E+00	.2727E+01
380	.1375E+01	.1024E+01	.1031E+03	.1001E+01	.3932E+00	.2861E+01
440	.1416E+01	.9534E+00	.1076E+03	.1001E+01	.3596E+00	.2990E+01
520	.1468E+01	.8568E+00	.1134E+03	.1001E+01	.3165E+00	.3153E+01
600	.1517E+01	.7596E+00	.1188E+03	.1000E+01	.2757E+00	.3309E+01

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--- MAT ND147   (601470) ENDF ID (9768)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5093E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4900E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5409E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1049E+03	.1001E+01	.6277E+00	.1391E+02	.1009E+01	.7494E+00	.2248E+02
20	.1128E+01	.1920E+01	.1086E+03	.1001E+01	.6140E+00	.1441E+02	.1013E+01	.7369E+00	.2328E+02
80	.1238E+01	.1902E+01	.1189E+03	.1001E+01	.5745E+00	.1582E+02	.1024E+01	.6995E+00	.2553E+02
140	.1339E+01	.1862E+01	.1284E+03	.1001E+01	.5367E+00	.1711E+02	.1033E+01	.6615E+00	.2759E+02
200	.1433E+01	.1802E+01	.1372E+03	.1001E+01	.4997E+00	.1831E+02	.1042E+01	.6224E+00	.2951E+02
260	.1521E+01	.1727E+01	.1455E+03	.1001E+01	.4634E+00	.1944E+02	.1050E+01	.5824E+00	.3131E+02
320	.1605E+01	.1640E+01	.1533E+03	.1001E+01	.4278E+00	.2050E+02	.1058E+01	.5420E+00	.3301E+02
380	.1684E+01	.1545E+01	.1607E+03	.1001E+01	.3932E+00	.2152E+02	.1065E+01	.5016E+00	.3462E+02
440	.1759E+01	.1444E+01	.1678E+03	.1001E+01	.3596E+00	.2248E+02	.1072E+01	.4616E+00	.3616E+02
520	.1854E+01	.1303E+01	.1767E+03	.1001E+01	.3165E+00	.2371E+02	.1081E+01	.4094E+00	.3812E+02
600	.1943E+01	.1159E+01	.1853E+03	.1000E+01	.2757E+00	.2488E+02	.1089E+01	.3589E+00	.3998E+02

--- MAT ND150   (601500) ENDF ID (9771)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3852E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1200E+01 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .5227E-05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5809E+02	.1001E+01	.6280E+00	.1398E+02	.1136E+01	.2466E+01	.3634E+02
20	.1128E+01	.1919E+01	.6010E+02	.1001E+01	.6142E+00	.1448E+02	.1187E+01	.2475E+01	.3754E+02
80	.1238E+01	.1901E+01	.6574E+02	.1001E+01	.5748E+00	.1589E+02	.1331E+01	.2476E+01	.4091E+02
140	.1339E+01	.1861E+01	.7090E+02	.1001E+01	.5370E+00	.1719E+02	.1466E+01	.2444E+01	.4397E+02
200	.1433E+01	.1802E+01	.7568E+02	.1001E+01	.5000E+00	.1840E+02	.1593E+01	.2382E+01	.4679E+02
260	.1521E+01	.1727E+01	.8015E+02	.1001E+01	.4637E+00	.1953E+02	.1713E+01	.2295E+01	.4943E+02
320	.1605E+01	.1640E+01	.8437E+02	.1001E+01	.4281E+00	.2060E+02	.1828E+01	.2190E+01	.5190E+02
380	.1684E+01	.1544E+01	.8838E+02	.1001E+01	.3934E+00	.2161E+02	.1938E+01	.2072E+01	.5423E+02
440	.1759E+01	.1443E+01	.9219E+02	.1001E+01	.3598E+00	.2259E+02	.2043E+01	.1943E+01	.5645E+02
520	.1854E+01	.1302E+01	.9703E+02	.1001E+01	.3168E+00	.2382E+02	.2178E+01	.1761E+01	.5926E+02
600	.1943E+01	.1159E+01	.1016E+03	.1000E+01	.2759E+00	.2499E+02	.2305E+01	.1573E+01	.6191E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .5052E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1200E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1068E+01	.1613E+01	.4761E+02	.1001E+01	.6280E+00	.1398E+02
20	.1098E+01	.1609E+01	.4927E+02	.1001E+01	.6142E+00	.1448E+02
80	.1182E+01	.1586E+01	.5390E+02	.1001E+01	.5748E+00	.1589E+02
140	.1259E+01	.1547E+01	.5814E+02	.1001E+01	.5370E+00	.1719E+02
200	.1331E+01	.1493E+01	.6207E+02	.1001E+01	.5000E+00	.1840E+02
260	.1398E+01	.1427E+01	.6575E+02	.1001E+01	.4637E+00	.1953E+02
320	.1461E+01	.1352E+01	.6922E+02	.1001E+01	.4281E+00	.2060E+02
380	.1522E+01	.1271E+01	.7252E+02	.1001E+01	.3934E+00	.2161E+02
440	.1579E+01	.1186E+01	.7566E+02	.1001E+01	.3598E+00	.2259E+02
520	.1651E+01	.1068E+01	.7964E+02	.1001E+01	.3168E+00	.2382E+02
600	.1719E+01	.9489E+00	.8342E+02	.1000E+01	.2759E+00	.2499E+02

* NOTE COMMENTS ON PAGE 15

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--- MAT NP237   (932370) ENDF ID (1337)
                 REACTION TYPE   2 IS SCATTER   REACTION TYPE 18 IS FISSION   REACTION TYPE 102 IS N-GAMMA
                 SIGMA ZERO .1751E+02 BARNS   SIGMA ZERO .1665E-01 BARNS   SIGMA ZERO .1692E+03 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S   G   GE   S

           0   .1077E+01   .1719E+01   .1141E+02   .9730E+00   .9660E+00   .5960E+02   .9803E+00   .2000E+01   .4833E+01
          20   .1114E+01   .1713E+01   .1174E+02   .9640E+00   .9854E+00   .6178E+02   .9733E+00   .2074E+01   .5059E+01
          80   .3217E+01   .1680E+01   .1267E+02   .9388E+00   .1054E+01   .6792E+02   .9545E+00   .2312E+01   .5732E+01
         140   .1309E+01   .1632E+01   .1351E+02   .9163E+00   .1125E+01   .7357E+02   .9388E+00   .2546E+01   .6368E+01
         200   .1394E+01   .1570E+01   .1428E+02   .8966E+00   .1186E+01   .7882E+02   .9271E+00   .2747E+01   .6941E+01
         260   .1473E+01   .1497E+01   .1500E+02   .8801E+00   .1235E+01   .8373E+02   .9208E+00   .2909E+01   .7447E+01
         320   .1546E+01   .1416E+01   .1567E+02   .8673E+00   .1272E+01   .8836E+02   .9219E+00   .3035E+01   .7891E+01
         380   .1614E+01   .1331E+01   .1631E+02   .8591E+00   .1296E+01   .9275E+02   .9326E+00   .3125E+01   .8274E+01
         440   .1678E+01   .1243E+01   .1691E+02   .8561E+00   .1306E+01   .9692E+02   .9545E+00   .3177E+01   .8594E+01
         520   .1757E+01   .1124E+01   .1767E+02   .8605E+00   .1292E+01   .1022E+03   .1003E+01   .3173E+01   .8908E+01
         600   .1830E-01   .1005E+01   .1840E+02   .8748E+00   .1241E+01   .1071E+03   .1075E+01   .3069E+01   .9076E+01

                 REACTION TYPE   1 IS TOTAL   REACTION TYPE   0 IS ABSORPTION
                 SIGMA ZERO .1867E+03 BARNS   SIGMA ZERO .1692E+03 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S

           0   .9894E+00   .1974E+01   .5454E+01   .9803E+00   .2000E+01   .4838E+01
          20   .9865E+00   .2040E+01   .5691E+01   .9733E+00   .2074E+01   .5065E+01
          80   .9791E+00   .2253E+01   .6368E+01   .9545E+00   .2312E+01   .5738E+01
         140   .9736E+00   .2460E+01   .7043E+01   .9388E+00   .2546E+01   .6374E+01
         200   .9709E+00   .2636E+01   .7636E+01   .9271E+00   .2747E+01   .6948E+01
         260   .9725E+00   .2777E+01   .8162E+01   .9208E+00   .2909E+01   .7455E+01
         320   .9804E+00   .2883E+01   .8628E+01   .9219E+00   .3035E+01   .7899E+01
         380   .9964E+00   .2957E+01   .9035E+01   .9325E+00   .3125E+01   .8282E+01
         440   .1022E+01   .2995E+01   .9381E+01   .9545E+00   .3177E+01   .8602E+01
         520   .1074E+01   .2981E+01   .9739E+01   .1003E+01   .3173E+01   .8918E+01
         600   .1145E+01   .2875E+01   .9959E+01   .1075E+01   .3068E+01   .9086E+01

--- MAT NP238   (932380) ENDF ID (8338)
                 REACTION TYPE   2 IS SCATTER   REACTION TYPE 18 IS FISSION   REACTION TYPE 102 IS N-GAMMA
                 SIGMA ZERO .2125E+02 BARNS   SIGMA ZERO .2029E+04 BARNS   SIGMA ZERO .2030E+03 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S   G   GE   S

           0   .1680E+01   .1750E+01   .8938E+01   .9929E+00   .5381E+00 -.8996E-01   .9931E+00   .5406E+00 -.3089E-01
          20   .1117E+01   .1744E+01   .9183E+01   .9909E+00   .5229E+00 -.8917E-01   .9911E+00   .5256E+00 -.2802E-01
          80   .1222E+01   .1713E-01   .9856E+01   .9851E+00   .4808E+00 -.8540E-01   .9855E+00   .4836E+00 -.1852E-01
         140   .1316E+01   .1665E+01   .1046E+02   .9795E+00   .4423E+00 -.7999E-01   .9799E+00   .4451E+00 -.7836E-02
         200   .1403E+01   .1600E+01   .1101E+02   .9739E+00   .4062E+00 -.7325E-01   .9745E+00   .4091E+00   .3794E-02
         260   .1484E+01   .1523E+01   .1152E+02   .9685E+00   .3722E+00 -.6536E-01   .9692E+00   .3751E+00   .1625E-01
         320   .1559E+01   .1438E+01   .1199E+02   .9631E+00   .3399E+00 -.5649E-01   .9640E+00   .3428E+00   .2947E-01
         380   .1630E+01   .1348E+01   .1243E+02   .9579E+00   .3094E+00 -.4671E-01   .9589E+00   .3122E+00   .4338E-01
         440   .1697E+01   .1253E+01   .1285E+02   .9527E+00   .2806E+00 -.3612E-01   .9539E+00   .2832E+00   .5794E-01
         520   .1780E+01   .1125E+01   .1337E+02   .9460E+00   .2445E+00 -.2087E-01   .9473E+00   .2470E+00   .7831E-01
         600   .1857E+01   .9952E+00   .1387E+02   .9392E+00   .2111E+00 -.4463E-02   .9407E+00   .2134E+00   .9958E-01

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                 REACTION TYPE   1 IS TOTAL   REACTION TYPE   0 IS ABSORPTION
                 SIGMA ZERO .2253E+04 BARNS   SIGMA ZERO .2232E+04 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S

           0   .9937E+00   .5497E+00   .5141E-03   .9929E+00   .5383E+00 -.8459E-01
          20   .9921E+00   .5347E+00   .3790E-02   .9910E+00   .5232E+00 -.8360E-01
          80   .9874E+00   .4927E+00 -.1439E-01   .9852E+00   .4811E+00 -.7932E-01
         140   .9827E+00   .4540E+00   .2592E-01   .9795E+00   .4425E+00 -.7343E-01
         200   .9780E+00   .4177E+00   .3822E-01   .9740E+00   .4065E+00 -.6624E-01
         260   .9734E+00   .3833E+00   .5123E-01   .9685E+00   .3724E+00 -.5794E-01
         320   .9688E+00   .3505E+00   .6485E-01   .9632E+00   .3402E+00 -.4867E-01
         380   .9643E+00   .3195E+00   .7909E-01   .9580E+00   .3097E+00 -.3851E-01
         440   .9599E+00   .2900E+00   .9388E-01   .9529E+00   .2808E+00 -.2756E-01
         520   .9540E+00   .2530E+00   .1144E+00   .9461E+00   .2448E+00 -.1185E-01
         600   .9480E+00   .2187E+00   .1357E+00   .9393E+00   .2113E+00   .5001E-02

--- MAT N14   (70140) ENDF ID (1275)
                 REACTION TYPE   2 IS SCATTER   REACTION TYPE 102 IS N-GAMMA   REACTION TYPE 103 IS (N,P)
                 SIGMA ZERO .9957E+01 BARNS   SIGMA ZERO .7500E-01 BARNS   SIGMA ZERO .1819E+01 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S   G   GE   S

           0   .1089E+01   .1920E+01   .1317E+02   .1001E+01   .6267E+00 -.1916E-02   .1001E+01   .6276E+00   .1944E-01
          20   .1128E+01   .1920E+01   .1356E+02   .1001E+01   .6129E+00 -.1971E-02   .1001E+01   .6138E+00   .2012E-01
          80   .1230E+01   .1902E+01   .1465E+02   .1001E+01   .5734E+00 -.2036E-02   .1001E+01   .5743E+00   .2205E-01
         140   .1339E+01   .1862E+01   .1564E+02   .1001E+01   .5357E+00 -.1937E-02   .1001E+01   .5366E+00   .2396E-01
         200   .1433E+01   .1802E+01   .1654E+02   .1001E+01   .4988E+00 -.1898E-02   .1001E+01   .4997E+00   .2568E-01
         260   .1521E+01   .1727E+01   .1738E+02   .1001E+01   .4626E+00 -.1894E-02   .1001E+01   .4634E+00   .2726E-01
         320   .1605E+01   .1640E+01   .1816E+02   .1001E+01   .4270E+00 -.1929E-02   .1001E+01   .4277E+00   .2871E-01
         380   .1684E+01   .1545E+01   .1889E+02   .1001E+01   .3923E+00 -.1948E-02   .1001E+01   .3930E+00   .3007E-01
         440   .1759E+01   .1444E+01   .1959E+02   .1000E+01   .3587E+00 -.1931E-02   .1001E+01   .3594E+00   .3145E-01
         520   .1854E+01   .1303E+01   .2046E+02   .1000E+01   .3158E+00 -.1776E-02   .1001E+01   .3164E+00   .3330E-01
         600   .1943E+01   .1159E+01   .2128E+02   .9996E+00   .2750E+00 -.1442E-02   .1000E+01   .2756E+00   .3524E-01

                 REACTION TYPE   1 IS TOTAL   REACTION TYPE   0 IS ABSORPTION
                 SIGMA ZERO .1185E+02 BARNS   SIGMA ZERO .1894E+01 BARNS
        NEUTRON
        TEMP(C)   G   GE   S   G   GE   S

           0   .1075E+01   .1713E+01   .1106E+02   .1001E+01   .6275E+00   .1860E-01
          20   .1108E+01   .1711E+01   .1140E+02   .1001E+01   .6138E+00   .1924E-01
          80   .1200E+01   .1690E+01   .1231E+02   .1001E+01   .5743E+00   .2110E-01
         140   .1285E+01   .1650E+01   .1314E+02   .1001E+01   .5366E+00   .2294E-01
         200   .1364E+01   .1594E+01   .1390E+02   .1001E+01   .4997E+00   .2459E-01
         260   .1438E+01   .1525E+01   .1460E+02   .1001E+01   .4633E+00   .2610E-01
         320   .1508E+01   .1446E+01   .1526E+02   .1001E+01   .4277E+00   .2750E-01
         380   .1575E+01   .1361E+01   .1588E+02   .1001E+01   .3930E+00   .2881E-01
         440   .1638E+01   .1270E+01   .1646E+02   .1001E+01   .3594E+00   .3013E-01
         520   .1718E+01   .1145E+01   .1719E+02   .1001E+01   .3164E+00   .3191E-01
         600   .1792E+01   .1018E+01   .1788E+02   .1000E+01   .2755E+00   .3379E-01

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--- MAT N15   (70150) ENDF ID (1307)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4418E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2400E-04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4418E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1920E+01	.1544E+02	.1004E+01	.9122E+02	.1090E+03	.1087E+01	.1921E+01	.1544E+02
20	.1125E+01	.1920E+01	.1591E+02	.1004E+01	.9120E+02	.1090E+03	.1125E+01	.1920E+01	.1591E+02
80	.1235E+01	.1902E+01	.1724E+02	.1004E+01	.9034E+02	.1083E+03	.1235E+01	.1902E+01	.1724E+02
140	.1335E+01	.1862E+01	.1843E+02	.1004E+01	.8844E+02	.1063E+03	.1335E+01	.1862E+01	.1843E+02
200	.1428E+01	.1802E+01	.1953E+02	.1005E+01	.8562E+02	.1033E+03	.1428E+01	.1803E+01	.1953E+02
260	.1515E+01	.1727E+01	.2055E+02	.1005E+01	.8206E+02	.9933E+02	.1515E+01	.1728E+01	.2055E+02
320	.1597E+01	.1640E+01	.2151E+02	.1005E+01	.7793E+02	.9469E+02	.1597E+01	.1641E+01	.2151E+02
380	.1675E+01	.1545E+01	.2241E+02	.1005E+01	.7339E+02	.8957E+02	.1675E+01	.1545E+01	.2241E+02
440	.1750E+01	.1444E+01	.2326E+02	.1005E+01	.6858E+02	.8412E+02	.1750E+01	.1444E+01	.2326E+02
520	.1843E+01	.1303E+01	.2433E+02	.1005E+01	.6190E+02	.7652E+02	.1843E+01	.1303E+01	.2433E+02
600	.1931E+01	.1159E+01	.2534E+02	.1005E+01	.5507E+02	.6873E+02	.1931E+01	.1159E+01	.2534E+02

--- MAT O16   (80160) ENDF ID (1276)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3748E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1780E-03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3748E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1653E+02	.1003E+01	.6285E+00	-.5864E-03	.1089E+01	.1920E+01	.1653E+02
20	.1128E+01	.1920E+01	.1705E+02	.1003E+01	.6147E+00	-.5690E-03	.1128E+01	.1919E+01	.1705E+02
80	.1238E+01	.1902E+01	.1848E+02	.1003E+01	.5752E+00	-.5279E-03	.1238E+01	.1902E+01	.1848E+02
140	.1339E+01	.1862E+01	.1978E+02	.1003E+01	.5374E+00	-.4984E-03	.1339E+01	.1862E+01	.1978E+02
200	.1433E+01	.1802E+01	.2098E+02	.1003E+01	.5004E+00	-.5138E-03	.1433E+01	.1802E+01	.2097E+02
260	.1521E+01	.1727E+01	.2208E+02	.1003E+01	.4640E+00	-.5212E-03	.1521E+01	.1727E+01	.2208E+02
320	.1605E+01	.1640E+01	.2312E+02	.1003E+01	.4284E+00	-.5389E-03	.1605E+01	.1640E+01	.2312E+02
380	.1684E+01	.1545E+01	.2410E+02	.1002E+01	.3937E+00	-.5447E-03	.1684E+01	.1545E+01	.2410E+02
440	.1759E+01	.1444E+01	.2503E+02	.1002E+01	.3600E+00	-.5227E-03	.1759E+01	.1443E+01	.2503E+02
520	.1854E+01	.1303E+01	.2620E+02	.1002E+01	.3169E+00	-.4424E-03	.1854E+01	.1303E+01	.2620E+02
600	.1943E+01	.1159E+01	.2730E+02	.1002E+01	.2760E+00	-.2004E-03	.1943E+01	.1159E+01	.2730E+02

--- MAT O17   (80170) ENDF ID (1317)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3740E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3830E-02 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .2350E+00 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1499E+02	.1000E+01	.6263E+00	.3585E-01	.1001E+01	.6277E+00	.3201E+00
20	.1128E+01	.1920E+01	.1545E+02	.1000E+01	.6126E+00	.3716E-01	.1001E+01	.6139E+00	.3316E+00
80	.1238E+01	.1902E+01	.1672E+02	.1000E+01	.5731E+00	.4085E-01	.1001E+01	.5745E+00	.3640E+00
140	.1339E+01	.1862E+01	.1788E+02	.1000E+01	.5353E+00	.4428E-01	.1001E+01	.5367E+00	.3938E+00
200	.1433E+01	.1802E+01	.1894E+02	.1000E+01	.4984E+00	.4750E-01	.1001E+01	.4997E+00	.4214E+00
260	.1521E+01	.1727E+01	.1992E+02	.1000E+01	.4622E+00	.5053E-01	.1001E+01	.4634E+00	.4474E+00
320	.1605E+01	.1640E+01	.2084E+02	.1000E+01	.4266E+00	.5342E-01	.1001E+01	.4278E+00	.4719E+00
380	.1684E+01	.1545E+01	.2171E+02	.9999E+00	.3920E+00	.5617E-01	.1001E+01	.3931E+00	.4951E+00
440	.1759E+01	.1444E+01	.2253E+02	.9998E+00	.3585E+00	.5882E-01	.1001E+01	.3595E+00	.5174E+00
520	.1854E+01	.1303E+01	.2356E+02	.9995E+00	.3156E+00	.6230E-01	.1001E+01	.3165E+00	.5458E+00
600	.1943E+01	.1159E+01	.2453E+02	.9990E+00	.2748E+00	.6577E-01	.1000E+01	.2756E+00	.5729E+00

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3979E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2388E+00 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1064E+01	.1842E+01	.1411E+02	.1001E+01	.6277E+00	.3155E+00
20	.1120E+01	.1841E+01	.1454E+02	.1001E+01	.6139E+00	.3269E+00
80	.1224E+01	.1822E+01	.1574E+02	.1001E+01	.5745E+00	.3589E+00
140	.1319E+01	.1782E+01	.1683E+02	.1001E+01	.5367E+00	.3882E+00
200	.1407E+01	.1724E+01	.1783E+02	.1001E+01	.4997E+00	.4154E+00
260	.1490E+01	.1651E+01	.1875E+02	.1001E+01	.4634E+00	.4410E+00
320	.1569E+01	.1567E+01	.1962E+02	.1001E+01	.4278E+00	.4651E+00
380	.1643E+01	.1476E+01	.2043E+02	.1001E+01	.3931E+00	.4881E+00
440	.1713E+01	.1378E+01	.2121E+02	.1001E+01	.3595E+00	.5101E+00
520	.1803E+01	.1244E+01	.2218E+02	.1001E+01	.3165E+00	.5380E+00
600	.1886E+01	.1106E+01	.2310E+02	.1000E+01	.2756E+00	.5648E+00

--- MAT PA231   (912310) ENDF ID (8131)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8519E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1039E-01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2269E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1074E+01	.1920E+01	.1900E+02	.1014E+01	.6289E+01	.6423E+02	.9974E+00	.4140E+01	.6393E+01
20	.1118E+01	.1927E+01	.1961E+02	.1016E+01	.6600E+01	.6669E+02	.9953E+00	.4341E+01	.6729E+01
80	.1211E+01	.1938E+01	.2134E+02	.1028E+01	.7514E+01	.7363E+02	.9939E+00	.4905E+01	.7672E+01
140	.1301E+01	.1933E+01	.2292E+02	.1052E+01	.8321E+01	.7997E+02	.1003E+01	.5369E+01	.8466E+01
200	.1384E+01	.1910E+01	.2438E+02	.1094E+01	.8974E+01	.8575E+02	.1030E+01	.5720E+01	.9095E+01
260	.1462E+01	.1872E+01	.2575E+02	.1163E+01	.9464E+01	.9100E+02	.1081E+01	.5960E+01	.9553E+01
320	.1532E+01	.1822E+01	.2703E+02	.1270E+01	.9786E+01	.9576E+02	.1162E+01	.6079E+01	.9824E+01
380	.1600E+01	.1761E+01	.2824E+02	.1418E+01	.9924E+01	.1000E+03	.1277E+01	.6058E+01	.9881E+01
440	.1666E+01	.1689E+01	.2939E+02	.1612E+01	.9855E+01	.1038E+03	.1425E+01	.5875E+01	.9700E+01
520	.1752E+01	.1572E+01	.3081E+02	.1941E+01	.9419E+01	.1081E+03	.1672E+01	.5374E+01	.9086E+01
600	.1836E+01	.1431E+01	.3213E+02	.2343E+01	.8620E+01	.1117E+03	.1966E+01	.4635E+01	.8124E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2355E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2269E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1000E+01	.4060E+01	.6851E+01	.9974E+00	.4140E+01	.6395E+01
20	.9995E+00	.4253E+01	.7198E+01	.9953E+00	.4341E+01	.6732E+01
80	.1002E+01	.4798E+01	.8170E+01	.9939E+00	.4905E+01	.7675E+01
140	.1014E+01	.5245E+01	.8992E+01	.1003E+01	.5369E+01	.8470E+01
200	.1043E+01	.5582E+01	.9652E+01	.1030E+01	.5720E+01	.9099E+01
260	.1095E+01	.5812E+01	.1014E+02	.1081E+01	.5960E+01	.9557E+01
320	.1175E+01	.5925E+01	.1045E+02	.1162E+01	.6079E+01	.9828E+01
380	.1289E+01	.5902E+01	.1055E+02	.1277E+01	.6058E+01	.9885E+01
440	.1434E+01	.5724E+01	.1042E+02	.1425E+01	.5875E+01	.9704E+01
520	.1675E+01	.5237E+01	.9876E+01	.1672E+01	.5374E+01	.9090E+01
600	.1961E+01	.4520E+01	.8998E+01	.1966E+01	.4636E+01	.8129E+01

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--- MAT PA233   (912330) ENDF ID (1391)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8341E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4146E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4980E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1861E+01	.2063E+02	.9864E+00	.5608E+00	.2194E+02	.1003E+01	.7786E+00	.2172E+02
20	.1125E+01	.1859E+01	.2129E+02	.9807E+00	.5509E+00	.2275E+02	.1005E+01	.7699E+00	.2250E+02
80	.1233E+01	.1836E+01	.2314E+02	.9656E+00	.5238E+00	.2502E+02	.1010E+01	.7435E+00	.2470E+02
140	.1332E+01	.1792E+01	.2482E+02	.9525E+00	.4986E+00	.2712E+02	.1016E+01	.7152E+00	.2673E+02
200	.1424E+01	.1730E+01	.2637E+02	.9414E+00	.4737E+00	.2909E+02	.1022E+01	.6841E+00	.2863E+02
260	.1510E+01	.1654E+01	.2781E+02	.9319E+00	.4484E+00	.3098E+02	.1029E+01	.6503E+00	.3045E+02
320	.1590E+01	.1567E+01	.2917E+02	.9238E+00	.4224E+00	.3280E+02	.1035E+01	.6141E+00	.3219E+02
380	.1667E+01	.1473E+01	.3045E+02	.9170E+00	.3959E+00	.3459E+02	.1043E+01	.5763E+00	.3390E+02
440	.1739E+01	.1373E+01	.3167E+02	.9113E+00	.3692E+00	.3637E+02	.1050E+01	.5374E+00	.3558E+02
520	.1830E+01	.1236E+01	.3321E+02	.9051E+00	.3333E+00	.3875E+02	.1060E+01	.4846E+00	.3783E+02
600	.1915E+01	.1097E+01	.3468E+02	.9003E+00	.2973E+00	.4116E+02	.1070E+01	.4313E+00	.4008E+02

--- MAT PB-NAT   (820000) ENDF ID (1382)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1119E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1780E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1137E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1554E+02	.1001E+01	.6277E+00	.1835E+00	.1088E+01	.1900E+01	.1530E+02
20	.1128E+01	.1920E+01	.1602E+02	.1001E+01	.6139E+00	.1902E+00	.1126E+01	.1899E+01	.1577E+02
80	.1238E+01	.1902E+01	.1735E+02	.1001E+01	.5745E+00	.2088E+00	.1234E+01	.1881E+01	.1708E+02
140	.1339E+01	.1862E+01	.1855E+02	.1001E+01	.5367E+00	.2258E+00	.1334E+01	.1841E+01	.1827E+02
200	.1433E+01	.1802E+01	.1966E+02	.1001E+01	.4997E+00	.2417E+00	.1427E+01	.1782E+01	.1936E+02
260	.1521E+01	.1727E+01	.2069E+02	.1001E+01	.4634E+00	.2566E+00	.1513E+01	.1707E+01	.2037E+02
320	.1605E+01	.1640E+01	.2165E+02	.1001E+01	.4278E+00	.2706E+00	.1595E+01	.1621E+01	.2132E+02
380	.1684E+01	.1545E+01	.2256E+02	.1001E+01	.3931E+00	.2840E+00	.1673E+01	.1527E+01	.2221E+02
440	.1759E+01	.1444E+01	.2342E+02	.1001E+01	.3595E+00	.2968E+00	.1747E+01	.1427E+01	.2306E+02
520	.1854E+01	.1303E+01	.2450E+02	.1001E+01	.3165E+00	.3131E+00	.1840E+01	.1287E+01	.2412E+02
600	.1943E+01	.1159E+01	.2552E+02	.1000E+01	.2757E+00	.3288E+00	.1928E+01	.1145E+01	.2512E+02

--- MAT PD102   (461020) ENDF ID (9379)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5760E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4799E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1056E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2232E+02	.7141E+01	.1486E+01	-.3656E+01	.3839E+01	.1723E+01	.1051E+02
20	.1128E+01	.1920E+01	.2304E+02	.6745E+01	.1471E+01	-.3100E+01	.3681E+01	.1716E+01	.1116E+02
80	.1238E+01	.1902E+01	.2506E+02	.5806E+01	.1417E+01	-.1752E+01	.3314E+01	.1681E+01	.1287E+02
140	.1339E+01	.1862E+01	.2689E+02	.5132E+01	.1350E+01	-.7517E+00	.3063E+01	.1629E+01	.1433E+02
200	.1433E+01	.1802E+01	.2859E+02	.4634E+01	.1275E+01	-.1372E-01	.2888E+01	.1563E+01	.1560E+02
260	.1521E+01	.1727E+01	.3016E+02	.4259E+01	.1194E+01	.6157E+00	.2766E+01	.1485E+01	.1673E+02
320	.1605E+01	.1640E+01	.3165E+02	.3969E+01	.1109E+01	.1101E+01	.2679E+01	.1399E+01	.1776E+02
380	.1684E+01	.1545E+01	.3305E+02	.3741E+01	.1023E+01	.1500E+01	.2619E+01	.1308E+01	.1871E+02
440	.1759E+01	.1444E+01	.3437E+02	.3560E+01	.9378E+00	.1834E+01	.2578E+01	.1214E+01	.1959E+02
520	.1854E+01	.1303E+01	.3605E+02	.3371E+01	.8262E+00	.2207E+01	.2544E+01	.1086E+01	.2067E+02
600	.1943E+01	.1159E+01	.3764E+02	.3226E+01	.7188E+00	.2517E+01	.2526E+01	.9590E+00	.2168E+02

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--- MAT PD104   (461040) ENDF ID (9381)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3702E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3874E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4089E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3010E+02	.1000E+01	.6287E+00	.5135E+02	.1081E+01	.1797E+01	.3211E+02
20	.1128E+01	.1919E+01	.3110E+02	.1000E+01	.6150E+00	.5320E+02	.1116E+01	.1796E+01	.3320E+02
80	.1238E+01	.1901E+01	.3391E+02	.1001E+01	.5757E+00	.5839E+02	.1216E+01	.1776E+01	.3623E+02
140	.1339E+01	.1861E+01	.3647E+02	.1001E+01	.5379E+00	.6316E+02	.1307E+01	.1736E+01	.3899E+02
200	.1433E+01	.1802E+01	.3883E+02	.1001E+01	.5010E+00	.6759E+02	.1392E+01	.1679E+01	.4155E+02
260	.1521E+01	.1727E+01	.4104E+02	.1001E+01	.4647E+00	.7175E+02	.1472E+01	.1607E+01	.4395E+02
320	.1605E+01	.1640E+01	.4311E+02	.1001E+01	.4291E+00	.7568E+02	.1547E+01	.1525E+01	.4620E+02
380	.1684E+01	.1544E+01	.4508E+02	.1001E+01	.3944E+00	.7942E+02	.1619E+01	.1436E+01	.4833E+02
440	.1759E+01	.1443E+01	.4695E+02	.1001E+01	.3607E+00	.8299E+02	.1687E+01	.1341E+01	.5036E+02
520	.1854E+01	.1303E+01	.4932E+02	.1001E+01	.3176E+00	.8752E+02	.1773E+01	.1209E+01	.5294E+02
600	.1943E+01	.1159E+01	.5156E+02	.1000E+01	.2767E+00	.9183E+02	.1853E+01	.1075E+01	.5537E+02

--- MAT PD105   (461050) ENDF ID (9382)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3812E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1400E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1781E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.2156E+02	.1001E+01	.6307E+00	.6663E+01	.1020E+01	.9063E+00	.9855E+01
20	.1128E+01	.1918E+01	.2228E+02	.1001E+01	.6170E+00	.6903E+01	.1029E+01	.8954E+00	.1019E+02
80	.1238E+01	.1900E+01	.2422E+02	.1002E+01	.5777E+00	.7577E+01	.1052E+01	.8607E+00	.1114E+02
140	.1339E+01	.1860E+01	.2599E+02	.1002E+01	.5400E+00	.8195E+01	.1074E+01	.8224E+00	.1200E+02
200	.1433E+01	.1800E+01	.2762E+02	.1002E+01	.5030E+00	.8770E+01	.1094E+01	.7807E+00	.1280E+02
260	.1521E+01	.1725E+01	.2914E+02	.1002E+01	.4667E+00	.9309E+01	.1113E+01	.7360E+00	.1355E+02
320	.1604E+01	.1638E+01	.3056E+02	.1002E+01	.4310E+00	.9819E+01	.1131E+01	.6894E+00	.1426E+02
380	.1683E+01	.1543E+01	.3191E+02	.1002E+01	.3962E+00	.1030E+02	.1148E+01	.6416E+00	.1493E+02
440	.1758E+01	.1442E+01	.3319E+02	.1002E+01	.3625E+00	.1077E+02	.1164E+01	.5935E+00	.1556E+02
520	.1853E+01	.1301E+01	.3480E+02	.1002E+01	.3193E+00	.1135E+02	.1184E+01	.5294E+00	.1637E+02
600	.1942E+01	.1158E+01	.3633E+02	.1002E+01	.2781E+00	.1191E+02	.1203E+01	.4663E+00	.1714E+02

--- MAT PD106   (461060) ENDF ID (9383)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3730E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2381E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3968E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3019E+02	.1001E+01	.6284E+00	.3841E+02	.1084E+01	.1842E+01	.3069E+02
20	.1128E+01	.1919E+01	.3120E+02	.1001E+01	.6146E+00	.3979E+02	.1120E+01	.1841E+01	.3172E+02
80	.1238E+01	.1901E+01	.3402E+02	.1001E+01	.5752E+00	.4367E+02	.1224E+01	.1822E+01	.3460E+02
140	.1339E+01	.1861E+01	.3658E+02	.1001E+01	.5374E+00	.4724E+02	.1319E+01	.1782E+01	.3722E+02
200	.1433E+01	.1802E+01	.3896E+02	.1001E+01	.5005E+00	.5055E+02	.1407E+01	.1724E+01	.3965E+02
260	.1521E+01	.1727E+01	.4117E+02	.1001E+01	.4642E+00	.5366E+02	.1490E+01	.1651E+01	.4192E+02
320	.1605E+01	.1640E+01	.4326E+02	.1001E+01	.4285E+00	.5660E+02	.1568E+01	.1567E+01	.4406E+02
380	.1684E+01	.1545E+01	.4523E+02	.1001E+01	.3938E+00	.5940E+02	.1643E+01	.1476E+01	.4608E+02
440	.1759E+01	.1443E+01	.4711E+02	.1001E+01	.3602E+00	.6207E+02	.1713E+01	.1378E+01	.4800E+02
520	.1854E+01	.1303E+01	.4948E+02	.1001E+01	.3171E+00	.6546E+02	.1803E+01	.1244E+01	.5044E+02
600	.1943E+01	.1159E+01	.5173E+02	.1001E+01	.2762E+00	.6868E+02	.1886E+01	.1106E+01	.5275E+02

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--- MAT PD108 (461080) ENDF ID (9386)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2325E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1220E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1453E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1911E+01	.1119E+03	.1002E+01	.6334E+00	.1966E+02	.1015E+01	.8379E+00	.3443E+02
20	.1128E+01	.1910E+01	.1159E+03	.1002E+01	.6198E+00	.2037E+02	.1022E+01	.8263E+00	.3566E+02
80	.1237E+01	.1891E+01	.1270E+03	.1002E+01	.5807E+00	.2236E+02	.1040E+01	.7905E+00	.3910E+02
140	.1338E+01	.1851E+01	.1371E+03	.1002E+01	.5431E+00	.2418E+02	.1056E+01	.7524E+00	.4226E+02
200	.1432E+01	.1791E+01	.1466E+03	.1003E+01	.5062E+00	.2588E+02	.1071E+01	.7118E+00	.4519E+02
260	.1520E+01	.1716E+01	.1554E+03	.1003E+01	.4698E+00	.2747E+02	.1086E+01	.6692E+00	.4794E+02
320	.1603E+01	.1629E+01	.1637E+03	.1003E+01	.4340E+00	.2898E+02	.1099E+01	.6253E+00	.5054E+02
380	.1681E+01	.1534E+01	.1716E+03	.1003E+01	.3992E+00	.3041E+02	.1112E+01	.5808E+00	.5301E+02
440	.1756E+01	.1433E+01	.1792E+03	.1004E+01	.3653E+00	.3177E+02	.1124E+01	.5362E+00	.5537E+02
520	.1850E+01	.1293E+01	.1888E+03	.1004E+01	.3219E+00	.3351E+02	.1139E+01	.4731E+00	.5816E+02
600	.1938E+01	.1150E+01	.1979E+03	.1004E+01	.2805E+00	.3516E+02	.1153E+01	.4197E+00	.6120E+02

--- MAT PD110 (461100) ENDF ID (9389)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4197E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2200E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4417E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2116E+02	.1002E+01	.6292E+00	.3640E+02	.1085E+01	.1856E+01	.2192E+02
20	.1128E+01	.1920E+01	.2184E+02	.1002E+01	.6155E+00	.3771E+02	.1122E+01	.1855E+01	.2263E+02
80	.1238E+01	.1902E+01	.2374E+02	.1002E+01	.5760E+00	.4139E+02	.1226E+01	.1836E+01	.2462E+02
140	.1339E+01	.1862E+01	.2547E+02	.1002E+01	.5382E+00	.4477E+02	.1322E+01	.1796E+01	.2643E+02
200	.1433E+01	.1802E+01	.2706E+02	.1002E+01	.5012E+00	.4792E+02	.1412E+01	.1737E+01	.2810E+02
260	.1521E+01	.1727E+01	.2855E+02	.1002E+01	.4648E+00	.5086E+02	.1496E+01	.1664E+01	.2966E+02
320	.1605E+01	.1640E+01	.2994E+02	.1002E+01	.4291E+00	.5365E+02	.1575E+01	.1580E+01	.3112E+02
380	.1684E+01	.1545E+01	.3125E+02	.1002E+01	.3943E+00	.5630E+02	.1650E+01	.1487E+01	.3250E+02
440	.1759E+01	.1444E+01	.3250E+02	.1002E+01	.3606E+00	.5883E+02	.1721E+01	.1390E+01	.3381E+02
520	.1854E+01	.1303E+01	.3408E+02	.1002E+01	.3175E+00	.6204E+02	.1811E+01	.1254E+01	.3547E+02
600	.1943E+01	.1159E+01	.3557E+02	.1002E+01	.2765E+00	.6509E+02	.1896E+01	.1115E+01	.3704E+02

--- MAT PM147 (611470) ENDF ID (9783)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3247E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1819E+03 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1405E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1077E+01	.1699E+01	.5337E+03	.9976E+00	.5870E+00	.1309E+02	.1136E+01	.2467E+01	.3638E+02
20	.1114E+01	.1692E+01	.5528E+03	.9966E+00	.5728E+00	.1356E+02	.1187E+01	.2476E+01	.3759E+02
80	.1216E+01	.1657E+01	.6066E+03	.9938E+00	.5325E+00	.1489E+02	.1331E+01	.2477E+01	.4096E+02
140	.1309E+01	.1606E+01	.6559E+03	.9910E+00	.4947E+00	.1612E+02	.1466E+01	.2445E+01	.4402E+02
200	.1394E+01	.1540E+01	.7018E+03	.9883E+00	.4585E+00	.1725E+02	.1593E+01	.2383E+01	.4685E+02
260	.1472E+01	.1464E+01	.7448E+03	.9856E+00	.4235E+00	.1832E+02	.1713E+01	.2297E+01	.4948E+02
320	.1545E+01	.1380E+01	.7854E+03	.9831E+00	.3896E+00	.1933E+02	.1828E+01	.2192E+01	.5196E+02
380	.1613E+01	.1290E+01	.8240E+03	.9806E+00	.3570E+00	.2029E+02	.1938E+01	.2073E+01	.5430E+02
440	.1677E+01	.1198E+01	.8609E+03	.9781E+00	.3257E+00	.2121E+02	.2044E+01	.1944E+01	.5652E+02
520	.1757E+01	.1073E+01	.9078E+03	.9748E+00	.2859E+00	.2237E+02	.2178E+01	.1762E+01	.5933E+02
600	.1830E+01	.9482E+00	.9523E+03	.9715E+00	.2484E+00	.2348E+02	.2305E+01	.1573E+01	.6198E+02

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1852E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1819E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9990E+00	.6065E+00	.2222E+02	.9976E+00	.5870E+00	.1309E+02
20	.9987E+00	.5924E+00	.2302E+02	.9966E+00	.5728E+00	.1356E+02
80	.9977E+00	.5521E+00	.2527E+02	.9938E+00	.5325E+00	.1489E+02
140	.9965E+00	.5142E+00	.2734E+02	.9910E+00	.4947E+00	.1612E+02
200	.9954E+00	.4775E+00	.2926E+02	.9883E+00	.4585E+00	.1725E+02
260	.9941E+00	.4417E+00	.3106E+02	.9856E+00	.4235E+00	.1832E+02
320	.9929E+00	.4070E+00	.3276E+02	.9831E+00	.3896E+00	.1933E+02
380	.9917E+00	.3734E+00	.3439E+02	.9806E+00	.3570E+00	.2029E+02
440	.9904E+00	.3410E+00	.3593E+02	.9781E+00	.3257E+00	.2121E+02
520	.9886E+00	.2997E+00	.3790E+02	.9748E+00	.2859E+00	.2237E+02
600	.9866E+00	.2607E+00	.3977E+02	.9715E+00	.2484E+00	.2348E+02

--- MAT PM148G (611480) ENDF ID (9784)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5117E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2000E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2005E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.2731E+01	.3397E+02	.1001E+01	.5456E+01	.2360E+02	.1001E+01	.5449E+01	.2362E+02
20	.1128E+01	.2775E+01	.3513E+02	.1001E+01	.5700E+01	.2457E+02	.1002E+01	.5692E+01	.2460E+02
80	.1238E+01	.2895E+01	.3841E+02	.1002E+01	.6476E+01	.2750E+02	.1002E+01	.6466E+01	.2753E+02
140	.1340E+01	.2989E+01	.4144E+02	.1004E+01	.7261E+01	.3041E+02	.1005E+01	.7250E+01	.3044E+02
200	.1436E+01	.3050E+01	.4425E+02	.1011E+01	.7982E+01	.3328E+02	.1012E+01	.7970E+01	.3331E+02
260	.1529E+01	.3075E+01	.4688E+02	.1027E+01	.8602E+01	.3605E+02	.1028E+01	.8588E+01	.3608E+02
320	.1620E+01	.3068E+01	.4935E+02	.1058E+01	.9110E+01	.3870E+02	.1059E+01	.9095E+01	.3872E+02
380	.1712E+01	.3029E+01	.5167E+02	.1110E+01	.9504E+01	.4117E+02	.1111E+01	.9487E+01	.4120E+02
440	.1805E+01	.2960E+01	.5386E+02	.1189E+01	.9776E+01	.4344E+02	.1190E+01	.9759E+01	.4347E+02
520	.1933E+01	.2820E+01	.5658E+02	.1343E+01	.9931E+01	.4610E+02	.1344E+01	.9913E+01	.4612E+02
600	.2065E+01	.2630E+01	.5909E+02	.1556E+01	.9818E+01	.4825E+02	.1557E+01	.9799E+01	.4828E+02

--- MAT PM148M (611481) ENDF ID (9785)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3288E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1062E+05 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1065E+05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1756E+01	.9283E+01	.1414E+02	.1380E+01	.3227E+01	.2539E+01	.1381E+01	.3246E+01	.2574E+01
20	.1973E+01	.9134E+01	.1390E+02	.1475E+01	.3095E+01	.2285E+01	.1476E+01	.3114E+01	.2321E+01
80	.2722E+01	.8178E+01	.1244E+02	.1793E+01	.2539E+01	.1293E+01	.1796E+01	.2556E+01	.1327E+01
140	.3574E+01	.6793E+01	.1031E+02	.2137E+01	.1895E+01	.1660E+00	.2141E+01	.1910E+01	.1974E+00
200	.4463E+01	.5421E+01	.8135E+01	.2478E+01	.1333E+01	-.8635E+00	.2484E+01	.1346E+01	-.8358E+00
260	.5336E+01	.4293E+01	.6239E+01	.2797E+01	.9167E+00	-.1697E+01	.2805E+01	.9271E+00	-.1673E+01
320	.6157E+01	.3439E+01	.4707E+01	.3083E+01	.6322E+00	-.2337E+01	.3092E+01	.6408E+00	-.2315E+01
380	.6906E+01	.2807E+01	.3501E+01	.3329E+01	.4432E+00	-.2820E+01	.3340E+01	.4505E+00	-.2800E+01
440	.7574E+01	.2333E+01	.2560E+01	.3537E+01	.3175E+00	-.3182E+01	.3549E+01	.3237E+00	-.3164E+01
520	.8336E+01	.1864E+01	.1623E+01	.3755E+01	.2106E+00	-.3526E+01	.3769E+01	.2157E+00	-.3510E+01
600	.8958E+01	.1513E+01	.9626E+00	.3915E+01	.1447E+00	-.3753E+01	.3930E+01	.1489E+00	-.3738E+01

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--- MAT PM149 (611490) ENDF ID (9786)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5139E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1400E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1405E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1942E+01	.4473E+02	.1001E+01	.6253E+00	.1314E+00	.1002E+01	.6301E+00	.2945E+00
20	.1128E+01	.1943E+01	.4626E+02	.1001E+01	.6114E+00	.1361E+00	.1002E+01	.6163E+00	.3048E+00
80	.1238E+01	.1929E+01	.5055E+02	.1001E+01	.5716E+00	.1490E+00	.1002E+01	.5766E+00	.3333E+00
140	.1339E+01	.1892E+01	.5447E+02	.1001E+01	.5334E+00	.1605E+00	.1002E+01	.5384E+00	.3592E+00
200	.1433E+01	.1837E+01	.5811E+02	.1001E+01	.4960E+00	.1709E+00	.1003E+01	.5009E+00	.3828E+00
260	.1521E+01	.1765E+01	.6152E+02	.1001E+01	.4593E+00	.1803E+00	.1003E+01	.4641E+00	.4047E+00
320	.1605E+01	.1681E+01	.6474E+02	.1001E+01	.4234E+00	.1890E+00	.1003E+01	.4280E+00	.4251E+00
380	.1684E+01	.1588E+01	.6779E+02	.1001E+01	.3885E+00	.1970E+00	.1004E+01	.3929E+00	.4442E+00
440	.1759E+01	.1489E+01	.7070E+02	.1001E+01	.3546E+00	.2046E+00	.1004E+01	.3588E+00	.4624E+00
520	.1855E+01	.1351E+01	.7440E+02	.1001E+01	.3114E+00	.2142E+00	.1004E+01	.3152E+00	.4855E+00
600	.1944E+01	.1208E+01	.7790E+02	.1000E+01	.2704E+00	.2235E+00	.1004E+01	.2739E+00	.5076E+00

--- MAT PM151 (611510) ENDF ID (9788)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5185E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7000E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7052E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3188E+02	.1001E+01	.6275E+00	.2625E+01	.1002E+01	.6370E+00	.2840E+01
20	.1128E+01	.1920E+01	.3295E+02	.1001E+01	.6138E+00	.2719E+01	.1002E+01	.6234E+00	.2942E+01
80	.1238E+01	.1902E+01	.3593E+02	.1001E+01	.5743E+00	.2985E+01	.1003E+01	.5841E+00	.3227E+01
140	.1339E+01	.1862E+01	.3866E+02	.1001E+01	.5366E+00	.3229E+01	.1004E+01	.5463E+00	.3489E+01
200	.1433E+01	.1802E+01	.4118E+02	.1001E+01	.4996E+00	.3456E+01	.1004E+01	.5092E+00	.3733E+01
260	.1521E+01	.1727E+01	.4353E+02	.1001E+01	.4633E+00	.3669E+01	.1005E+01	.4726E+00	.3962E+01
320	.1605E+01	.1640E+01	.4574E+02	.1001E+01	.4277E+00	.3870E+01	.1006E+01	.4366E+00	.4178E+01
380	.1684E+01	.1545E+01	.4784E+02	.1001E+01	.3930E+00	.4063E+01	.1006E+01	.4015E+00	.4384E+01
440	.1759E+01	.1444E+01	.4983E+02	.1001E+01	.3594E+00	.4247E+01	.1007E+01	.3674E+00	.4582E+01
520	.1854E+01	.1303E+01	.5235E+02	.1001E+01	.3164E+00	.4481E+01	.1007E+01	.3236E+00	.4833E+01
600	.1943E+01	.1159E+01	.5474E+02	.1000E+01	.2755E+00	.4705E+01	.1007E+01	.2820E+00	.5073E+01

--- MAT PR141 (591410) ENDF ID (9742)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2171E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1150E+02 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .4173E-06 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.1492E+03	.1001E+01	.6277E+00	.1309E+01	.1121E+01	.2296E+01	.3009E+02
20	.1128E+01	.1918E+01	.1545E+03	.1001E+01	.6140E+00	.1356E+01	.1168E+01	.2302E+01	.3108E+02
80	.1238E+01	.1900E+01	.1694E+03	.1001E+01	.5746E+00	.1488E+01	.1302E+01	.2297E+01	.3383E+02
140	.1339E+01	.1859E+01	.1830E+03	.1001E+01	.5368E+00	.1610E+01	.1426E+01	.2262E+01	.3634E+02
200	.1433E+01	.1800E+01	.1956E+03	.1001E+01	.4998E+00	.1723E+01	.1543E+01	.2201E+01	.3865E+02
260	.1521E+01	.1725E+01	.2075E+03	.1001E+01	.4635E+00	.1829E+01	.1653E+01	.2118E+01	.4080E+02
320	.1604E+01	.1638E+01	.2187E+03	.1001E+01	.4279E+00	.1929E+01	.1758E+01	.2019E+01	.4282E+02
380	.1683E+01	.1543E+01	.2293E+03	.1001E+01	.3932E+00	.2024E+01	.1859E+01	.1907E+01	.4472E+02
440	.1758E+01	.1441E+01	.2395E+03	.1001E+01	.3596E+00	.2115E+01	.1955E+01	.1787E+01	.4654E+02
520	.1853E+01	.1301E+01	.2524E+03	.1001E+01	.3166E+00	.2231E+01	.2077E+01	.1618E+01	.4882E+02
600	.1942E+01	.1157E+01	.2646E+03	.1000E+01	.2757E+00	.2341E+01	.2192E+01	.1444E+01	.5099E+02

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	REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1809E-04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1367E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1150E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1136E+01	.2464E+01	.3627E+02	.1015E+01	.8327E+00	.2480E+02	.1001E+01	.6278E+00	.1309E+01
20	.1186E+01	.2473E+01	.3747E+02	.1021E+01	.8210E+00	.2568E+02	.1001E+01	.6140E+00	.1356E+01
80	.1331E+01	.2474E+01	.4083E+02	.1039E+01	.7850E+00	.2815E+02	.1001E+01	.5746E+00	.1488E+01
140	.1465E+01	.2442E+01	.4389E+02	.1055E+01	.7468E+00	.3041E+02	.1001E+01	.5368E+00	.1610E+01
200	.1592E+01	.2380E+01	.4670E+02	.1070E+01	.7063E+00	.3251E+02	.1001E+01	.4998E+00	.1723E+01
260	.1712E+01	.2293E+01	.4933E+02	.1084E+01	.6638E+00	.3449E+02	.1001E+01	.4635E+00	.1829E+01
320	.1827E+01	.2189E+01	.5180E+02	.1097E+01	.6200E+00	.3635E+02	.1001E+01	.4279E+00	.1929E+01
380	.1937E+01	.2070E+01	.5413E+02	.1109E+01	.5757E+00	.3812E+02	.1001E+01	.3932E+00	.2024E+01
440	.2042E+01	.1941E+01	.5634E+02	.1121E+01	.5314E+00	.3981E+02	.1001E+01	.3596E+00	.2115E+01
520	.2177E+01	.1760E+01	.5914E+02	.1136E+01	.4729E+00	.4195E+02	.1001E+01	.3166E+00	.2231E+01
600	.2303E+01	.1571E+01	.6179E+02	.1150E+01	.4157E+00	.4398E+02	.1000E+01	.2757E+00	.2341E+01

--- MAT PR142 (591420) ENDF ID (9743)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4977E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2000E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2498E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.8063E+02	.1001E+01	.6277E+00	.7397E+01	.1019E+01	.8852E+00	.2199E+02
20	.1128E+01	.1920E+01	.8346E+02	.1001E+01	.6139E+00	.7663E+01	.1026E-01	.8741E+00	.2277E+02
80	.1238E+01	.1902E+01	.9137E+02	.1001E+01	.5745E+00	.8411E+01	.1048E+01	.8389E+00	.2494E+02
140	.1339E+01	.1862E+01	.9862E+02	.1001E+01	.5367E+00	.9098E+01	.1069E+01	.8007E+00	.2694E+02
200	.1433E+01	.1802E+01	.10538E+03	.1001E+01	.4997E+00	.9737E+01	.1087E+01	.7593E+00	.2879E+02
260	.1521E+01	.1727E+01	.1117E+03	.1001E+01	.4634E+00	.1034E+02	.1105E+01	.7152E+00	.3052E+02
320	.1605E+01	.1640E+01	.1176E+03	.1001E+01	.4278E+00	.1090E+02	.1121E+01	.6694E+00	.3216E+02
380	.1684E+01	.1545E+01	.1232E+03	.1001E+01	.3931E+00	.1144E+02	.1137E+01	.6226E+00	.3372E+02
440	.1759E+01	.1444E+01	.1286E+03	.1001E+01	.3595E+00	.1195E+02	.1152E+01	.5755E+00	.3520E+02
520	.1854E+01	.1303E+01	.1354E+03	.1001E+01	.3165E+00	.1261E+02	.1171E+01	.5130E+00	.3708E+02
600	.1943E+01	.1159E+01	.1419E+03	.1000E+01	.2756E+00	.1323E+02	.1188E+01	.4517E+00	.3887E+02

--- MAT PR143 (591430) ENDF ID (9745)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5000E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8900E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9400E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.9048E+02	.1001E+01	.6277E+00	.1826E+01	.1006E+01	.6964E+00	.6542E+01
20	.1128E+01	.1920E+01	.9366E+02	.1001E+01	.6139E+00	.1892E+01	.1008E+01	.6834E+00	.6773E+01
80	.1238E+01	.1902E+01	.1026E+03	.1001E+01	.5745E+00	.2077E+01	.1014E+01	.6451E+00	.7422E+01
140	.1339E+01	.1862E+01	.1107E+03	.1001E+01	.5367E+00	.2246E+01	.1019E+01	.6072E+00	.8017E+01
200	.1433E+01	.1802E+01	.1183E+03	.1001E+01	.4997E+00	.2404E+01	.1024E+01	.5690E+00	.8569E+01
260	.1521E+01	.1727E+01	.1254E+03	.1001E+01	.4634E+00	.2552E+01	.1029E+01	.5306E+00	.9087E+01
320	.1605E+01	.1640E+01	.1321E+03	.1001E+01	.4278E+00	.2692E+01	.1033E+01	.4923E+00	.9576E+01
380	.1684E+01	.1545E+01	.1385E+03	.1001E+01	.3931E+00	.2825E+01	.1037E+01	.4544E+00	.1004E+02
440	.1759E+01	.1444E+01	.1445E+03	.1001E+01	.3595E+00	.2952E+01	.1041E+01	.4172E+00	.1048E+02
520	.1854E+01	.1303E+01	.1522E+03	.1001E+01	.3165E+00	.3113E+01	.1046E+01	.3690E+00	.1104E+02
600	.1943E+01	.1159E+01	.1595E+03	.1000E+01	.2756E+00	.3266E+01	.1050E+01	.3226E+00	.1158E+02

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--- MAT PU236   (942360) ENDF ID (8436)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2122E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1627E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1627E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1081E+01	.1770E+01	.1042E+02	.9927E+00	.5297E+00	.1547E+01	.9927E+00	.5297E+00	.1523E+01
20	.1119E+01	.1765E+01	.1072E+02	.9906E+00	.5143E+00	.1607E+01	.9906E+00	.5143E+00	.1582E+01
80	.1224E+01	.1736E+01	.1154E+02	.9845E+00	.4714E+00	.1776E+01	.9845E+00	.4714E+00	.1749E+01
140	.1319E+01	.1688E+01	.1228E+02	.9786E+00	.4323E+00	.1934E+01	.9786E+00	.4323E+00	.1904E+01
200	.1407E+01	.1624E+01	.1296E+02	.9727E+00	.3959E+00	.2081E+01	.9727E+00	.3959E+00	.2050E+01
260	.1488E+01	.1548E+01	.1358E+02	.9669E+00	.3616E+00	.2222E+01	.9669E+00	.3616E+00	.2188E+01
320	.1565E+01	.1463E+01	.1417E+02	.9613E+00	.3294E+00	.2355E+01	.9613E+00	.3294E+00	.2320E+01
380	.1637E+01	.1371E+01	.1472E+02	.9557E+00	.2990E+00	.2483E+01	.9557E+00	.2990E+00	.2446E+01
440	.1704E+01	.1276E+01	.1524E+02	.9501E+00	.2704E+00	.2607E+01	.9501E+00	.2704E+00	.2568E+01
520	.1789E+01	.1146E+01	.1589E+02	.9428E+00	.2348E+00	.2765E+01	.9428E+00	.2348E+00	.2724E+01
600	.1867E+01	.1015E+01	.1650E+02	.9355E+00	.2021E+00	.2916E+01	.9355E+00	.2021E+00	.2873E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .3466E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .3253E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9981E+00	.6057E+00	.2079E+01	.9927E+00	.5297E+00	.1535E+01
20	.9984E+00	.5909E+00	.2153E+01	.9906E+00	.5143E+00	.1594E+01
80	.9992E+00	.5489E+00	.2361E+01	.9845E+00	.4714E+00	.1762E+01
140	.9994E+00	.5092E+00	.2553E+01	.9786E+00	.4323E+00	.1919E+01
200	.9993E+00	.4711E+00	.2733E+01	.9727E+00	.3959E+00	.2066E+01
260	.9989E+00	.4343E+00	.2902E+01	.9669E+00	.3616E+00	.2205E+01
320	.9982E+00	.3988E+00	.3062E+01	.9613E+00	.3294E+00	.2338E+01
380	.9974E+00	.3646E+00	.3215E+01	.9557E+00	.2990E+00	.2465E+01
440	.9963E+00	.3319E+00	.3362E+01	.9501E+00	.2704E+00	.2587E+01
520	.9946E+00	.2906E+00	.3549E+01	.9428E+00	.2348E+00	.2744E+01
600	.9925E+00	.2519E+00	.3728E+01	.9355E+00	.2021E+00	.2895E+01

--- MAT PU237   (942370) ENDF ID (8437)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1173E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .2100E+04 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5400E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1498E+02	.1001E+01	.6277E+00	.6695E-01	.1001E+01	.6277E+00	-.1065E+00
20	.1128E+01	.1920E+01	.1544E+02	.1001E+01	.6139E+00	.6937E-01	.1001E+01	.6139E+00	-.1103E+00
80	.1238E+01	.1902E+01	.1671E+02	.1001E+01	.5745E+00	.7618E-01	.1001E+01	.5745E+00	-.1210E+00
140	.1339E+01	.1862E+01	.1787E+02	.1001E+01	.5367E+00	.8243E-01	.1001E+01	.5367E+00	-.1309E+00
200	.1433E+01	.1802E+01	.1893E+02	.1001E+01	.4997E+00	.8823E-01	.1001E+01	.4997E+00	-.1401E+00
260	.1521E+01	.1727E+01	.1991E+02	.1001E+01	.4634E+00	.9368E-01	.1001E+01	.4634E+00	-.1488E+00
320	.1605E+01	.1640E+01	.2083E+02	.1001E+01	.4278E+00	.9884E-01	.1001E+01	.4278E+00	-.1570E+00
380	.1684E+01	.1545E+01	.2169E+02	.1001E+01	.3931E+00	.1038E+00	.1001E+01	.3931E+00	-.1649E+00
440	.1759E+01	.1444E+01	.2251E+02	.1001E+01	.3595E+00	.1085E+00	.1001E+01	.3595E+00	-.1725E+00
520	.1854E+01	.1303E+01	.2355E+02	.1001E+01	.3165E+00	.1147E+00	.1001E+01	.3165E+00	-.1821E+00
600	.1943E+01	.1159E+01	.2452E+02	.1000E+01	.2756E+00	.1208E+00	.1000E+01	.2756E+00	-.1912E+00

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2652E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2640E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1002E+01	.6334E+00	.9762E-01	.1001E+01	.6277E+00	.3148E-01
20	.1002E+01	.6197E+00	.1008E+00	.1001E+01	.6139E+00	.3263E-01
80	.1002E+01	.5803E+00	.1096E+00	.1001E+01	.5745E+00	.3584E-01
140	.1003E+01	.5425E+00	.1177E+00	.1001E+01	.5367E+00	.3880E-01
200	.1003E+01	.5055E+00	.1251E+00	.1001E+01	.4997E+00	.4152E-01
260	.1003E+01	.4690E+00	.1320E+00	.1001E+01	.4634E+00	.4409E-01
320	.1004E+01	.4332E+00	.1385E+00	.1001E+01	.4278E+00	.4650E-01
380	.1004E+01	.3982E+00	.1446E+00	.1001E+01	.3931E+00	.4880E-01
440	.1004E+01	.3643E+00	.1504E+00	.1001E+01	.3595E+00	.5103E-01
520	.1005E+01	.3208E+00	.1579E+00	.1001E+01	.3165E+00	.5397E-01
600	.1005E+01	.2795E+00	.1652E+00	.1000E+01	.2756E+00	.5696E-01

--- MAT PU238   (942380) ENDF ID (1338)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2031E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1701E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5611E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1068E+01	.1629E+01	.1419E+02	.9679E+00	.3034E+00	.6961E+00	.9678E+00	.3023E+00	-.4956E+00
20	.1103E+01	.1622E+01	.1463E+02	.9582E+00	.2876E+00	.7422E+00	.9580E+00	.2865E+00	-.4924E+00
80	.1201E+01	.1587E+01	.1585E+02	.9305E+00	.2468E+00	.8766E+00	.9302E+00	.2457E+00	-.4783E+00
140	.1288E+01	.1538E+01	.1696E+02	.9045E+00	.2136E+00	.1006E+01	.9042E+00	.2126E+00	-.4595E+00
200	.1368E+01	.1475E+01	.1798E+02	.8802E+00	.1860E+00	.1130E+01	.8798E+00	.1849E+00	-.4377E+00
260	.1441E+01	.1403E+01	.1893E+02	.8573E+00	.1625E+00	.1250E+01	.8568E+00	.1614E+00	-.4140E+00
320	.1510E+01	.1323E+01	.1983E+02	.8357E+00	.1422E+00	.1366E+01	.8352E+00	.1412E+00	-.3892E+00
380	.1573E+01	.1238E+01	.2068E+02	.8153E+00	.1246E+00	.1478E+01	.8147E+00	.1237E+00	-.3637E+00
440	.1633E+01	.1151E+01	.2148E+02	.7960E+00	.1092E+00	.1586E+01	.7953E+00	.1083E+00	-.3380E+00
520	.1707E+01	.1032E+01	.2250E+02	.7718E+00	.9137E-01	.1726E+01	.7710E+00	.9059E-01	-.3035E+00
600	.1775E+01	.9133E+00	.2347E+02	.7490E+00	.7613E-01	.1860E+01	.7482E+00	.7545E-01	-.2692E+00

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .5984E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .5781E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9712E+00	.3474E+00	.3662E-01	.9678E+00	.3024E+00	-.4605E+00
20	.9630E+00	.3319E+00	.5580E-01	.9580E+00	.2866E+00	-.4561E+00
80	.9394E+00	.2913E+00	.1143E+00	.9302E+00	.2458E+00	-.4384E+00
140	.9172E+00	.2576E+00	.1732E+00	.9042E+00	.2126E+00	-.4164E+00
200	.8964E+00	.2287E+00	.2319E+00	.8798E+00	.1849E+00	-.3916E+00
260	.8767E+00	.2036E+00	.2899E+00	.8568E+00	.1615E+00	-.3651E+00
320	.8581E+00	.1814E+00	.3469E+00	.8352E+00	.1413E+00	-.3376E+00
380	.8405E+00	.1616E+00	.4027E+00	.8147E+00	.1237E+00	-.3095E+00
440	.8238E+00	.1437E+00	.4573E+00	.7954E+00	.1083E+00	-.2813E+00
520	.8028E+00	.1226E+00	.5282E+00	.7710E+00	.9062E-01	-.2438E+00
600	.7831E+00	.1039E+00	.5969E+00	.7482E+00	.7547E-01	-.2066E+00

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--- MAT PU239 (942390) ENDF ID (1399)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8002E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .7417E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2702E+03 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1067E+01	.2398E+01	.2379E+02	.1045E+01	.2676E+01	.2309E+01	.1102E+01	.4790E+01	.5063E+01
20	.1102E+01	.2437E+01	.2460E+02	.1057E+01	.2743E+01	.2389E+01	.1132E+01	.4930E+01	.5218E+01
80	.1198E+01	.2539E+01	.2687E+02	.1102E+01	.2877E+01	.2534E+01	.1244E+01	.5210E+01	.5491E+01
140	.1285E+01	.2613E+01	.2895E+02	.1169E+01	.2909E+01	.2531E+01	.1396E+01	.5287E+01	.5471E+01
200	.1368E+01	.2651E+01	.3085E+02	.1259E+01	.2835E+01	.2373E+01	.1592E+01	.5156E+01	.5152E+01
260	.1450E+01	.2649E+01	.3261E+02	.1372E+01	.2655E+01	.2064E+01	.1830E+01	.4823E+01	.4542E+01
320	.1534E+01	.2602E+01	.3422E+02	.1504E+01	.2387E+01	.1626E+01	.2103E+01	.4318E+01	.3685E+01
380	.1621E+01	.2508E+01	.3570E+02	.1650E+01	.2061E+01	.1104E+01	.2402E+01	.3705E+01	.2669E+01
440	.1712E+01	.2374E+01	.3705E+02	.1805E+01	.1719E+01	.5503E+00	.2716E+01	.3063E+01	.1599E+01
520	.1837E+01	.2150E+01	.3869E+02	.2016E+01	.1298E+01	-.1549E+00	.3142E+01	.2277E+01	.2407E+00
600	.1967E+01	.1899E+01	.4020E+02	.2225E+01	.9550E+00	-.7678E+00	.3560E+01	.1642E+01	-.9329E+00

NEUTRON TEMP(C)	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1020E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1012E+04 BARNS		
	G	GE	S	G	GE	S
0	.1060E+01	.3234E+01	.3207E+01	.1060E+01	.3240E+01	.3044E+01
20	.1077E+01	.3320E+01	.3313E+01	.1077E+01	.3327E+01	.3144E+01
80	.1140E+01	.3493E+01	.3508E+01	.1140E+01	.3500E+01	.3323E+01
140	.1230E+01	.3537E+02	.3517E+01	.1230E+01	.3544E+01	.3316E+01
200	.1348E+01	.3448E+01	.3333E+01	.1348E+01	.3455E+01	.3115E+01
260	.1494E+01	.3230E+01	.2960E+01	.1495E+01	.3234E+01	.2726E+01
320	.1663E+01	.2900E+01	.2427E+01	.1664E+01	.2902E+01	.2176E+01
380	.1849E+01	.2500E+01	.1790E+01	.1851E+01	.2500E+01	.1521E+01
440	.2045E+01	.2081E+01	.1114E+01	.2048E+01	.2078E+01	.8303E+00
520	.2313E+01	.1564E+01	.2547E+00	.2317E+01	.1560E+01	-.4927E-01
600	.2576E+01	.1144E+01	-.4901E+00	.2581E+01	.1138E+01	-.8119E+00

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--- MAT PU240 (942400) ENDF ID (1380)

NEUTRON TEMP(C)	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1553E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .5707E-01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2897E+03 BARNS		
	G	GE	S	G	GE	S	G	GE	S
0	.1023E+01	.7473E+00	.5559E+03	.1021E+01	.1102E+01	.5776E+02	.1023E+01	.1145E+01	.2993E+02
20	.1049E+01	.7122E+00	.5761E+03	.1026E+01	.1104E+01	.5985E+02	.1028E+01	.1149E+01	.3103E+02
80	.1116E+01	.6133E+00	.6338E+03	.1042E+01	.1107E+01	.6579E+02	.1045E+01	.1156E+01	.3417E+02
140	.1168E+01	.5271E+00	.6885E+03	.1058E+01	.1103E+01	.7139E+02	.1063E+01	.1156E+01	.3720E+02
200	.1209E+01	.4537E+00	.7423E+03	.1075E+01	.1091E+01	.7680E+02	.1082E+01	.1145E+01	.4025E+02
260	.1240E+01	.3921E+00	.7969E+03	.1093E+01	.1068E+01	.8216E+02	.1102E+01	.1124E+01	.4342E+02
320	.1263E+01	.3412E+00	.8533E+03	.1112E+01	.1038E+01	.8758E+02	.1123E+01	.1094E+01	.4680E+02
380	.1278E+01	.3001E+00	.9120E+03	.1132E+01	.9996E+00	.9306E+02	.1144E+01	.1056E+01	.5038E+02
440	.1288E+01	.2676E+00	.9724E+03	.1153E+01	.9555E+00	.9859E+02	.1167E+01	.1011E+01	.5412E+02
520	.1293E+01	.2354E+00	.1053E-04	.1183E+01	.8887E+00	.1059E+03	.1199E+01	.9416E+00	.5916E+02
600	.1292E+01	.2126E+00	.1132E+04	.1213E+01	.8141E+00	.1129E+03	.1233E+01	.8640E+00	.6403E+02

NEUTRON TEMP(C)	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2913E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2898E+03 BARNS		
	G	GE	S	G	GE	S
0	.1023E+01	.1143E+01	.3274E+02	.1023E+01	.1145E+01	.2994E+02
20	.1028E+01	.1147E+01	.3394E+02	.1028E+01	.1149E+01	.3103E+02
80	.1046E+01	.1153E+01	.3737E+02	.1045E+01	.1156E+01	.3417E+02
140	.1064E+01	.1152E+01	.4068E+02	.1063E+01	.1156E+01	.3720E+02
200	.1083E+01	.1142E+01	.4400E+02	.1082E+01	.1145E+01	.4025E+02
260	.1103E+01	.1120E+01	.4745E+02	.1102E+01	.1124E+01	.4343E+02
320	.1123E+01	.1090E+01	.5110E+02	.1123E+01	.1094E+01	.4681E+02
380	.1145E+01	.1052E+01	.5498E+02	.1144E+01	.1056E+01	.5039E+02
440	.1168E+01	.1007E+01	.5902E+02	.1167E+01	.1011E+01	.5413E+02
520	.1200E+01	.9379E+00	.6447E+02	.1199E+01	.9416E+00	.5917E+02
600	.1233E+01	.8605E+00	.6973E+02	.1233E+01	.8640E+00	.6404E+02

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--- MAT PU241   (942410) ENDF ID (1381)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1100E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1015E+04 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3614E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1066E+01	.2017E+01	.1790E+02	.1037E+01	.1387E+01	.1025E+01	.1031E+01	.1625E+01	.1270E+01
20	.1101E+01	.2032E+01	.1848E+02	.1047E+01	.1386E+01	.1035E+01	.1039E+01	.1638E+01	.1297E+01
80	.1198E+01	.2061E+01	.2011E+02	.1083E+01	.1347E+01	.1009E+01	.1071E+01	.1634E+01	.1313E+01
140	.1287E+01	.2065E+01	.2159E+02	.1130E+01	.1258E+01	.9049E+00	.1119E+01	.1563E+01	.1226E+01
200	.1371E+01	.2040E+01	.2294E+02	.1188E+01	.1123E+01	.7327E+00	.1182E+01	.1430E+01	.1046E+01
260	.1452E+01	.1985E+01	.2418E+02	.1254E+01	.9593E+00	.5141E+00	.1257E+01	.1250E+01	.7945E+00
320	.1532E+01	.1904E+01	.2533E+02	.1323E+01	.7864E+00	.2779E+00	.1339E+01	.1048E+01	.5057E+00
380	.1611E+01	.1802E+01	.2639E+02	.1392E+01	.6242E+00	.5149E-01	.1425E+01	.8498E+00	.2158E+00
440	.1690E+01	.1685E+01	.2738E+02	.1460E+01	.4854E+00	-.1474E+00	.1510E+01	.6745E+00	-.4971E-01
520	.1793E+01	.1515E+01	.2861E+02	.1545E+01	.3422E+00	-.3590E+00	.1620E+01	.4879E+00	-.3460E+00
600	.1894E+01	.1339E+01	.2977E+02	.1620E+01	.2413E+00	-.5127E+00	.1722E+01	.3522E+00	-.5751E+00

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1387E+04 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1376E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1036E+01	.1454E+01	.1222E+01	.1036E+01	.1449E+01	.1089E+01
20	.1045E+01	.1457E+01	.1242E+01	.1044E+01	.1452E+01	.1104E+01
80	.1080E+01	.1428E+01	.1240E+01	.1079E+01	.1422E+01	.1089E+01
140	.1129E+01	.1343E+01	.1153E+01	.1127E+01	.1338E+01	.9893E+00
200	.1188E+01	.1210E+01	.9905E+00	.1187E+01	.1204E+01	.8151E+00
260	.1256E+01	.1043E+01	.7748E+00	.1255E+01	.1036E+01	.5877E+00
320	.1329E+01	.8633E+00	.5359E+00	.1327E+01	.8550E+00	.3378E+00
380	.1403E+01	.6923E+00	.3031E+00	.1401E+01	.6835E+00	.9462E-01
440	.1475E+01	.5442E+00	.9629E-01	.1474E+01	.5351E+00	-.1218E+00
520	.1567E+01	.3895E+00	-.1259E+00	.1565E+01	.3805E+00	-.3556E+00
600	.1649E+01	.2789E+00	-.2889E+00	.1647E+01	.2704E+00	-.5291E+00

--- MAT PU242   (942420) ENDF ID (1342)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7729E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1043E-02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1916E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1848E+01	.5323E+02	.1001E+01	.6305E+00	.5938E+03	.1009E+01	.7537E+00	.7193E+02
20	.1124E+01	.1845E+01	.5507E+02	.1001E+01	.6169E+00	.6152E+03	.1011E+01	.7432E+00	.7451E+02
80	.1232E+01	.1821E+01	.6021E+02	.1002E+01	.5776E+00	.6752E+03	.1017E+01	.7117E+00	.8178E+02
140	.1331E+01	.1776E+01	.6492E+02	.1002E+01	.5399E+00	.7303E+03	.1023E+01	.6789E+00	.8844E+02
200	.1423E+01	.1714E+01	.6929E+02	.1002E+01	.5029E+00	.7816E+03	.1029E+01	.6444E+00	.9464E+02
260	.1508E+01	.1637E+01	.7337E+02	.1002E+01	.4665E+00	.8297E+03	.1035E+01	.6081E+00	.1005E+03
320	.1588E+01	.1550E+01	.7722E+02	.1002E+01	.4309E+00	.8751E+03	.1041E+01	.5705E+00	.1060E+03
380	.1664E+01	.1456E+01	.8087E+02	.1002E+01	.3962E+00	.9183E+03	.1048E+01	.5321E+00	.1112E+03
440	.1736E+01	.1357E+01	.8435E+02	.1002E+01	.3624E+00	.9596E+03	.1054E+01	.4933E+00	.1162E+03
520	.1826E+01	.1221E+01	.8876E+02	.1002E+01	.3192E+00	.1012E+04	.1063E+01	.4416E+00	.1225E+03
600	.1910E+01	.1083E+01	.9294E+02	.1002E+01	.2780E+00	.1062E+04	.1071E+01	.3904E+00	.1285E+03

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2689E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1916E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1031E+01	.1068E+01	.6657E+02	.1009E+01	.7537E+00	.7195E+02
20	.1043E+01	.1060E+01	.6894E+02	.1011E+01	.7432E+00	.7454E+02
80	.1079E+01	.1030E+01	.7560E+02	.1017E+01	.7117E+00	.8181E+02
140	.1111E+01	.9943E+00	.8171E+02	.1023E+01	.6789E+00	.8848E+02
200	.1142E+01	.9517E+00	.8738E+02	.1029E+01	.6444E+00	.9468E+02
260	.1171E+01	.9038E+00	.9270E+02	.1035E+01	.6081E+00	.1005E+03
320	.1199E+01	.8520E+00	.9772E+02	.1041E+01	.5705E+00	.1060E+03
380	.1225E+01	.7976E+00	.1025E+03	.1048E+01	.5321E+00	.1112E+03
440	.1250E+01	.7415E+00	.1071E+03	.1054E+01	.4933E+00	.1162E+03
520	.1282E+01	.6655E+00	.1128E+03	.1063E+01	.4416E+00	.1226E+03
600	.1312E+01	.5894E+00	.1183E+03	.1071E+01	.3904E+00	.1286E+03

--- MAT PU243   (942430) ENDF ID (8443)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1975E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .1814E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8811E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1080E+01	.1747E+01	.1059E+02	.9947E+00	.5511E+00	.2769E+01	.9947E+00	.5513E+00	.2841E+01
20	.1117E+01	.1741E+01	.1089E+02	.9929E+00	.5363E+00	.2873E+01	.9929E+00	.5364E+00	.2947E+01
80	.1221E+01	.1710E+01	.1173E+02	.9877E+00	.4949E+00	.3166E+01	.9877E+00	.4951E+00	.3247E+01
140	.1316E+01	.1660E+01	.1249E+02	.9826E+00	.4569E+00	.3437E+01	.9826E+00	.4571E+00	.3525E+01
200	.1403E+01	.1596E+01	.1318E+02	.9776E+00	.4211E+00	.3693E+01	.9776E+00	.4213E+00	.3787E+01
260	.1483E+01	.1520E+01	.1382E+02	.9728E+00	.3870E+00	.3937E+01	.9728E+00	.3872E+00	.4037E+01
320	.1559E+01	.1435E+01	.1442E+02	.9681E+00	.3546E+00	.4172E+01	.9681E+00	.3548E+00	.4278E+01
380	.1629E+01	.1344E+01	.1498E+02	.9634E+00	.3237E+00	.4402E+01	.9635E+00	.3239E+00	.4513E+01
440	.1696E+01	.1249E+01	.1552E+02	.9589E+00	.2944E+00	.4630E+01	.9590E+00	.2945E+00	.4746E+01
520	.1779E+01	.1121E+01	.1619E+02	.9529E+00	.2575E+00	.4933E+01	.9530E+00	.2576E+00	.5056E+01
600	.1855E+01	.9918E+00	.1682E+02	.9470E+00	.2230E+00	.5241E+01	.9471E+00	.2232E+00	.5369E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2892E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2695E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1000E+01	.6328E+00	.3325E+01	.9947E+00	.5511E+00	.2793E+01
20	.1001E+01	.6186E+00	.3443E+01	.9929E+00	.5363E+00	.2897E+01
80	.1004E+01	.5779E+00	.3775E+01	.9877E+00	.4950E+00	.3192E+01
140	.1005E+01	.5391E+00	.4082E+01	.9826E+00	.4569E+00	.3466E+01
200	.1007E+01	.5014E+00	.4370E+01	.9776E+00	.4211E+00	.3724E+01
260	.1008E+01	.4644E+00	.4642E+01	.9728E+00	.3871E+00	.3970E+01
320	.1008E+01	.4284E+00	.4904E+01	.9681E+00	.3547E+00	.4207E+01
380	.1009E+01	.3934E+00	.5159E+01	.9634E+00	.3238E+00	.4439E+01
440	.1009E+01	.3596E+00	.5409E+01	.9589E+00	.2944E+00	.4668E+01
520	.1009E+01	.3165E+00	.5739E+01	.9530E+00	.2575E+00	.4973E+01
600	.1009E+01	.2756E+00	.6071E+01	.9471E+00	.2231E+00	.5283E+01

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--- MAT PU244   (942440) ENDF ID (8444)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .9635E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1830E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1147E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1913E+01	.2473E+02	.9991E+00	.5984E+00	.6249E+02	.1074E+01	.1703E+01	.3076E+02
20	.1128E+01	.1913E+01	.2554E+02	.9986E+00	.5841E+00	.6473E+02	.1107E+01	.1701E+01	.3180E+02
80	.1238E+01	.1894E+01	.2780E+02	.9969E+00	.5433E+00	.7106E+02	.1199E+01	.1679E+01	.3471E+02
140	.1338E+01	.1854E+01	.2986E+02	.9953E+00	.5049E+00	.7686E+02	.1284E+01	.1638E+01	.3736E+02
200	.1432E+01	.1794E+01	.3177E+02	.9936E+00	.4678E+00	.8226E+02	.1362E+01	.1582E+01	.3982E+02
260	.1520E+01	.1719E+01	.3354E+02	.9920E+00	.4320E+00	.8732E+02	.1436E+01	.1514E+01	.4212E+02
320	.1603E+01	.1632E+01	.3520E+02	.9903E+00	.3972E+00	.9211E+02	.1505E+01	.1435E+01	.4429E+02
380	.1682E+01	.1537E+01	.3678E+02	.9887E+00	.3637E+00	.9666E+02	.1571E+01	.1350E+01	.4634E+02
440	.1757E+01	.1436E+01	.3828E+02	.9870E+00	.3315E+00	.1010E+03	.1634E+01	.1259E+01	.4829E+02
520	.1851E+01	.1296E+01	.4017E+02	.9846E+00	.2907E+00	.1065E+03	.1713E+01	.1135E+01	.5076E+02
600	.1939E+01	.1152E+01	.4196E+02	.9821E+00	.2522E+00	.1118E+03	.1787E+01	.1009E+01	.5311E+02

--- MAT P31   (150310) ENDF ID (1315)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4100E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1994E-00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4299E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1593E+02	.9890E+00	.6092E+00	.3314E+00	.1084E+01	.1859E+01	.1521E+02
20	.1128E+01	.1920E+01	.1642E+02	.9895E+00	.5954E+00	.3430E+00	.1122E+01	.1858E+01	.1568E+02
80	.1238E+01	.1902E+01	.1780E+02	.9903E+00	.5560E+00	.3763E+00	.1227E+01	.1839E+01	.1699E+02
140	.1339E+01	.1862E+01	.1904E+02	.9903E+00	.5185E+00	.4080E+00	.1323E+01	.1799E+01	.1817E+02
200	.1433E+01	.1802E+01	.2018E+02	.9900E+00	.4821E+00	.4380E+00	.1413E+01	.1741E+01	.1926E+02
260	.1521E+01	.1727E+01	.2124E+02	.9895E+00	.4464E+00	.4667E+00	.1497E+01	.1668E+01	.2028E+02
320	.1605E+01	.1640E+01	.2223E+02	.9888E+00	.4117E+00	.4941E+00	.1576E+01	.1583E+01	.2122E+02
380	.1684E+01	.1545E+01	.2317E+02	.9880E+00	.3780E+00	.5205E+00	.1651E+01	.1491E+01	.2212E+02
440	.1759E+01	.1444E+01	.2405E+02	.9872E+00	.3453E+00	.5458E+00	.1723E+01	.1393E+01	.2296E+02
520	.1854E+01	.1303E+01	.2517E+02	.9859E+00	.3037E+00	.5784E+00	.1814E+01	.1257E+01	.2403E+02
600	.1943E+01	.1159E+01	.2622E+02	.9845E+00	.2643E+00	.6096E+00	.1898E+01	.1118E+01	.2503E+02

--- MAT RB85   (370850) ENDF ID (9160)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2574E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4600E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3034E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.4053E+02	.1001E+01	.6278E+00	.1349E+02	.1076E+01	.1724E+01	.3643E+02
20	.1128E+01	.1919E+01	.4191E+02	.1001E+01	.6141E+00	.1397E+02	.1109E+01	.1721E+01	.3767E+02
80	.1238E+01	.1901E+01	.4577E+02	.1001E+01	.5746E+00	.1534E+02	.1202E+01	.1700E+01	.4115E+02
140	.1339E+01	.1861E+01	.4930E+02	.1001E+01	.5368E+00	.1659E+02	.1288E+01	.1661E+01	.4434E+02
200	.1433E+01	.1802E+01	.5256E+02	.1001E+01	.4999E+00	.1775E+02	.1368E+01	.1605E+01	.4728E+02
260	.1521E+01	.1727E+01	.5561E+02	.1001E+01	.4636E+00	.1885E+02	.1443E+01	.1535E+01	.5004E+02
320	.1605E+01	.1640E+01	.5849E+02	.1001E+01	.4280E+00	.1988E+02	.1513E+01	.1456E+01	.5263E+02
380	.1684E+01	.1545E+01	.6121E+02	.1001E+01	.3933E+00	.2086E+02	.1580E+01	.1370E+01	.5509E+02
440	.1759E+01	.1443E+01	.6381E+02	.1001E+01	.3597E+00	.2180E+02	.1644E+01	.1279E+01	.5744E+02
520	.1854E+01	.1303E+01	.6710E+02	.1001E+01	.3166E+00	.2299E+02	.1724E+01	.1153E+01	.6041E+02
600	.1943E+01	.1159E+01	.7021E+02	.1000E+01	.2758E+00	.2412E+02	.1800E+01	.1025E+01	.6322E+02

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--- MAT RB86   (370860) ENDF ID (9161)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3562E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4900E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8462E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2908E+02	.1001E+01	.6273E+00	.4827E+01	.1038E+01	.1171E+01	.1504E+02
20	.1128E+01	.1920E+01	.3005E+02	.1001E+01	.6136E+00	.5000E+01	.1055E+01	.1163E+01	.1554E+02
80	.1238E+01	.1902E+01	.3275E+02	.1001E+01	.5741E+00	.5489E+01	.1101E+01	.1133E+01	.1696E+02
140	.1339E+01	.1862E+01	.3521E+02	.1001E+01	.5363E+00	.5937E+01	.1143E+01	.1094E+01	.1826E+02
200	.1433E+01	.1802E+01	.3749E+02	.1001E+01	.4994E+00	:6353E+01	.1183E+01	.1048E+01	.1946E+02
260	.1521E+01	.1727E+01	.3961E+02	.1001E+01	.4631E+00	.6744E+01	.1220E+01	.9952E+00	.2058E+02
320	.1605E+01	.1640E+01	.4161E+02	.1001E+01	.4275E+00	.7114E+01	.1255E+01	.9380E+00	.2164E+02
380	.1684E+01	.1545E+01	.4350E+02	.1001E+01	.3928E+00	.7465E+01	.1288E+01	.8777E+00	.2264E+02
440	.1759E+01	.1444E+01	.4530E+02	.1001E+01	.3593E+00	.7801E+01	.1320E+01	.8157E+00	.2359E+02
520	.1854E+01	.1303E+01	.4758E+02	.1000E+01	.3163E+00	.8227E+01	.1360E+01	.7316E+00	.2479E+02
600	.1943E+01	.1159E+01	.4974E+02	.1000E+01	.2754E+00	.8632E+01	.1397E+01	.6474E+00	.2593E+02

--- MAT RB87   (370870) ENDF ID (9163)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2259E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1200E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2379E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.4168E+02	.1001E+01	.6282E+00	.1854E+02	.1084E+01	.1855E+01	.4051E+02
20	.1128E+01	.1919E+01	.4310E+02	.1001E+01	.6145E+00	.1921E+02	.1122E+01	.1854E+01	.4189E+02
80	.1238E+01	.1901E+01	.4707E+02	.1001E+01	.5750E+00	.2108E+02	.1226E+01	.1835E+01	.4576E+02
140	.1339E+01	.1861E+01	.5071E+02	.1001E+01	.5373E+00	.2281E+02	.1322E+01	.1795E+01	.4930E+02
200	.1433E+01	.1802E+01	.5407E+02	.1001E+01	.5003E+00	.2441E+02	.1411E+01	.1736E+01	.5258E+02
260	.1521E+01	.1727E+01	.5722E+02	.1001E+01	.4640E+00	.2591E+02	.1495E+01	.1663E+01	.5564E+02
320	.1605E+01	.1640E+01	.6018E+02	.1001E+01	.4284E+00	.2733E+02	.1574E+01	.1579E+01	.5852E+02
380	.1684E+01	.1545E+01	.6299E+02	.1001E+01	.3937E+00	.2868E+02	.1649E+01	.1487E+01	.6126E+02
440	.1759E+01	.1443E+01	.6566E+02	.1001E+01	.3600E+00	.2996E+02	.1721E+01	.1389E+01	.6386E+02
520	.1854E+01	.1303E+01	.6905E+02	.1001E+01	.3170E+00	.3160E+02	.1811E+01	.1253E+01	.6716E+02
600	.1943E+01	.1159E+01	.7226E+02	.1001E+01	.2761E+00	.3316E+02	.1895E+01	.1114E+01	.7029E+02

--- MAT RE185   (751850) ENDF ID (1083)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2062E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1141E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1347E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1797E+01	.2273E+02	.1004E+01	.69988E+00	.1623E+02	.1017E+01	.8670E+00	.1722E+02
20	.1121E+01	.1793E+01	.2347E+02	.1005E+01	.6871E+00	.1681E+02	.1023E+01	.8563E+00	.1783E+02
80	.1228E+01	.1764E+01	.2553E+02	.1009E+01	.6526E+00	.1845E+02	.1042E+01	.8227E+00	.1953E+02
140	.1325E+01	.1716E+01	.2741E+02	.1012E+01	.6182E+00	.1995E+02	.1060E+01	.7862E+00	.2109E+02
200	.1415E+01	.1651E+01	.2914E+02	.1015E+01	.5831E+00	.2135E+02	.1076E+01	.7467E+00	.2254E+02
260	.1498E+01	.1574E+01	.3075E+02	.1018E+01	.5473E+00	.2266E+02	.1092E+01	.7044E+00	.2390E+02
320	.1576E+01	.1488E+01	.3227E+02	.1022E+01	.5109E+00	.2390E+02	.1107E+01	.6604E+00	.2518E+02
380	.1649E+01	.1395E+01	.3371E+02	.1025E+01	.4744E+00	.2509E+02	.1121E+01	.6152E+00	.2641E+02
440	.1719E+01	.1298E+01	.3507E+02	.1029E+01	.4381E+00	.2622E+02	.1134E+01	.5697E+00	.2758E+02
520	.1805E+01	.1165E+01	.3679E+02	.1034E+01	.3904E+00	.2767E+02	.1152E+01	.5090E+00	.2907E+02
600	.1886E+01	.1032E+01	.3842E+02	.1038E+01	.3438E+00	.2906E+02	.1168E+01	.4490E+00	.3049E+02

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--- MAT RE187 (751870) ENDF ID (1084)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1010E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7481E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8491E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1085E+01	.1843E+01	.3423E+02	.9872E+00	.4810E+00	.3563E+01	.9988E+00	.6430E+00	.7211E+01
20	.1123E+01	.1840E+01	.3539E+02	.9831E+00	.4659E+00	.3700E+01	.9997E+00	.6293E+00	.7469E+01
80	.1231E+01	.1816E+01	.3862E+02	.9714E+00	.4246E+00	.4087E+01	.1002E+01	.5901E+00	.8194E+01
140	.1329E+01	.1772E+01	.4156E+02	.9603E+00	.3876E+00	.4444E+01	.1004E+01	.5523E+00	.8859E+01
200	.1420E+01	.1711E+01	.4429E+02	.9499E+00	.3538E+00	.4779E+01	.1006E+01	.5152E+00	.9478E+01
260	.1504E+01	.1635E+01	.4684E+02	.9400E+00	.3224E+00	.5094E+01	.1007E+01	.4785E+00	.1006E+02
320	.1584E+01	.1549E+01	.4924E+02	.9306E+00	.2930E+00	.5393E+01	.1008E+01	.4424E+00	.1061E+02
380	.1659E+01	.1456E+01	.5151E+02	.9216E+00	.2655E+00	.5679E+01	.1009E+01	.4071E+00	.1113E+02
440	.1731E+01	.1358E+01	.5368E+02	.9130E+00	.2399E+00	.5952E+01	.1010E+01	.3728E+00	.1163E+02
520	.1820E+01	.1222E+01	.5642E+02	.9020E+00	.2081E+00	.6300E+01	.1011E+01	.3287E+00	.1226E+02
600	.1903E+01	.1085E+01	.5902E+02	.8915E+00	.1789E+00	.6632E+01	.1012E+01	.2867E+00	.1286E+02

--- MAT RH103 (451030) ENDF ID (1310)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4661E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1463E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1510E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1085E+01	.1801E+01	.2643E+02	.1019E+01	.1005E+01	.7525E+01	.1022E+01	.1029E+01	.8109E+01
20	.1123E+01	.1797E+01	.2730E+02	.1024E+01	.1003E+01	.7793E+01	.1027E+01	.1027E+01	.8395E+01
80	.1230E+01	.1767E+01	.2974E+02	.1038E+01	.9936E+00	.8552E+01	.1044E+01	.1017E+01	.9207E+01
140	.1328E+01	.1717E+01	.3196E+02	.1053E+01	.9789E+00	.9267E+01	.1061E+01	.1002E+01	.9967E+01
200	.1418E+01	.1652E+01	.3401E+02	.1068E+01	.9570E+00	.9958E+01	.1079E+01	.9785E+00	.1070E+02
260	.1502E+01	.1573E+01	.3593E+02	.1084E+01	.9279E+00	.1065E+02	.1097E+01	.9479E+00	.1143E+02
320	.1581E+01	.1485E+01	.3774E+02	.1100E+01	.8926E+00	.1135E+02	.1115E+01	.9109E+00	.1216E+02
380	.1655E+01	.1390E+01	.3946E+02	.1117E+01	.8521E+00	.1207E+02	.1134E+01	.8687E+00	.1291E+02
440	.1725E+01	.1292E+01	.4110E+02	.1135E+01	.8074E+00	.1282E+02	.1153E+01	.8224E+00	.1369E+02
520	.1812E+01	.1158E+01	.4320E+02	.1159E+01	.7426E+00	.1385E+02	.1179E+01	.7554E+00	.1476E+02
600	.1893E+01	.1024E+01	.4521E+02	.1184E+01	.6731E+00	.1490E+02	.1206E+01	.6840E+00	.1584E+02

--- MAT RH105 (451050) ENDF ID (9355)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4069E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1600E+05 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1600E+05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2368E+02	.8035E+00	.2656E+00	.2815E+00	.8036E+00	.2660E+00	.2874E+00
20	.1128E+01	.1920E+01	.2445E+02	.7844E+00	.2646E+00	.3371E+00	.7845E+00	.2650E+00	.3432E+00
80	.1238E+01	.1902E+01	.2660E+02	.7317E+00	.2678E+00	.5032E+00	.7318E+00	.2682E+00	.5098E+00
140	.1339E+01	.1862E+01	.2857E+02	.6855E+00	.2774E+00	.6683E+00	.6856E+00	.2778E+00	.6754E+00
200	.1433E+01	.1802E+01	.3038E+02	.6450E+00	.2893E+00	.8311E+00	.6452E+00	.2897E+00	.8387E+00
260	.1521E+01	.1727E+01	.3206E+02	.6095E+00	.3009E+00	.9897E+00	.6097E+00	.3013E+00	.9976E+00
320	.1605E+01	.1640E+01	.3365E+02	.5782E+00	.3112E+00	.1142E+01	.5785E+00	.3115E+00	.1151E+01
380	.1684E+01	.1545E+01	.3515E+02	.5508E+00	.3198E+00	.1289E+01	.5511E+00	.3201E+00	.1297E+01
440	.1759E+01	.1444E+01	.3657E+02	.5268E+00	.3266E+00	.1427E+01	.5271E+00	.3269E+00	.1436E+01
520	.1854E+01	.1303E+01	.3837E+02	.4996E+00	.3325E+00	.1599E+01	.5000E+00	.3328E+00	.1608E+01
600	.1943E+01	.1159E+01	.4007E+02	.4775E+00	.3337E+00	.1753E+01	.4779E+00	.3339E+00	.1763E+01

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--- MAT RU100 (441000) ENDF ID (9329)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3914E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5800E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9714E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2519E+02	.1001E+01	.6277E+00	.1026E+01	.1037E+01	.1148E+01	.1076E+02
20	.1128E+01	.1920E+01	.2602E+02	.1001E+01	.6139E+00	.1063E+01	.1052E+01	.1140E+01	.1112E+02
80	.1238E+01	.1902E+01	.2833E+02	.1001E+01	.5745E+00	.1166E+01	.1097E+01	.1109E+01	.1211E+02
140	.1339E+01	.1862E+01	.3043E+02	.1001E+01	.5367E+00	.1262E+01	.1137E+01	.1070E+01	.1301E+02
200	.1433E+01	.1802E+01	.3237E+02	.1001E+01	.4997E+00	.1350E+01	.1175E+01	.1025E+01	.1385E+02
260	.1521E+01	.1727E+01	.3418E+02	.1001E+01	.4634E+00	.1433E+01	.1211E+01	.9726E+00	.1463E+02
320	.1605E+01	.1640E+01	.3588E+02	.1001E+01	.4278E+00	.1512E+01	.1244E+01	.9163E+00	.1536E+02
380	.1684E+01	.1545E+01	.3749E+02	.1001E+01	.3931E+00	.1586E+01	.1276E+01	.8571E+00	.1605E+02
440	.1759E+01	.1444E+01	.3902E+02	.1001E+01	.3595E+00	.1658E+01	.1306E+01	.7963E+00	.1671E+02
520	.1854E+01	.1303E+01	.4095E+02	.1001E+01	.3165E+00	.1748E+01	.1344E+01	.7139E+00	.1754E+02
600	.1943E+01	.1159E+01	.4278E+02	.1000E+01	.2756E+00	.1835E+01	.1380E+01	.6316E+00	.1833E+02

--- MAT RU101 (441010) ENDF ID (9330)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3591E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3101E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6692E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.2511E+02	.1002E+01	.6405E+00	.3476E+02	.1048E+01	.1326E+01	.2958E+02
20	.1128E+01	.1918E+01	.2593E+02	.1002E+01	.6271E+00	.3601E+02	.1070E+01	.1320E+01	.3060E+02
80	.1238E+01	.1900E+01	.2823E+02	.1003E+01	.5884E+00	.3953E+02	.1129E+01	.1292E+01	.3347E+02
140	.1339E+01	.1859E+01	.3033E+02	.1003E+01	.5510E+00	.4275E+02	.1183E+01	.1253E+01	.3608E+02
200	.1433E+01	.1800E+01	.3226E+02	.1004E+01	.5143E+00	.4575E+02	.1234E+01	.1204E+01	.3851E+02
260	.1521E+01	.1725E+01	.3406E+02	.1004E+01	.4779E+00	.4856E+02	.1282E+01	.1147E+01	.4078E+02
320	.1604E+01	.1638E+01	.3576E+02	.1005E+01	.4420E+00	.5122E+02	.1327E+01	.1084E+01	.4293E+02
380	.1683E+01	.1543E+01	.3736E+02	.1006E+01	.4069E+00	.5375E+02	.1369E+01	.1016E+01	.4496E+02
440	.1758E+01	.1441E+01	.3889E+02	.1006E+01	.3727E+00	.5617E+02	.1410E+01	.9462E+00	.4689E+02
520	.1853E+01	.1301E+01	.4081E+02	.1007E+01	.3288E+00	.5923E+02	.1461E+01	.8504E+00	.4935E+02
600	.1942E+01	.1157E+01	.4263E+02	.1008E+01	.2868E+00	.6215E+02	.1509E+01	.7539E+00	.5168E+02

--- MAT RU102 (441020) ENDF ID (9331)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3949E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1300E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5249E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2229E+02	.1001E+01	.6279E+00	.2441E+01	.1067E+01	.1600E+01	.1737E+02
20	.1128E+01	.1920E+01	.2301E+02	.1001E+01	.6142E+00	.2529E+01	.1097E+01	.1596E+01	.1794E+02
80	.1238E+01	.1902E+01	.2503E+02	.1001E+01	.5747E+00	.2776E+01	.1180E+01	.1573E+01	.1952E+02
140	.1339E+01	.1862E+01	.2686E+02	.1001E+01	.5369E+00	.3003E+01	.1256E+01	.1534E+01	.2095E+02
200	.1433E+01	.1802E+01	.2855E+02	.1001E+01	.4999E+00	.3214E+01	.1326E+01	.1480E+01	.2228E+02
260	.1521E+01	.1727E+01	.3013E+02	.1001E+01	.4636E+00	.3411E+01	.1393E+01	.1414E+01	.2351E+02
320	.1605E+01	.1640E+01	.3160E+02	.1001E+01	.4280E+00	.3598E+01	.1455E+01	.1340E+01	.2467E+02
380	.1684E+01	.1545E+01	.3300E+02	.1001E+01	.3933E+00	.3776E+01	.1515E+01	.1260E+01	.2576E+02
440	.1759E+01	.1444E+01	.3433E+02	.1001E+01	.3597E+00	.3945E+01	.1571E+01	.1175E+01	.2681E+02
520	.1854E+01	.1303E+01	.3601E+02	.1001E+01	.3167E+00	.4161E+01	.1643E+01	.1059E+01	.2812E+02
600	.1943E+01	.1159E+01	.3759E+02	.1001E+01	.2758E+00	.4366E+01	.1709E+01	.9404E+00	.2936E+02

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--- MAT RU103   (441030) ENDF ID (9332)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4017E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7700E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1172E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2464E+02	.1001E+01	.6277E+00	.9447E+01	.1031E+01	.1071E+01	.1466E+02
20	.1128E+01	.1920E+01	.2545E+02	.1001E+01	.6139E+00	.9787E+01	.1045E+01	.1062E+01	.1516E+02
80	.1238E+01	.1902E+01	.2770E+02	.1001E+01	.5745E+00	.1074E+02	.1082E+01	.1029E+01	.1656E+02
140	.1339E+01	.1862E+01	.2976E+02	.1001E+01	.5367E+00	.1162E+02	.1117E+01	.9909E+00	.1784E+02
200	.1433E+01	.1802E+01	.3165E+02	.1001E+01	.4997E+00	.1243E+02	.1149E+01	.9463E+00	.1902E+02
260	.1521E+01	.1727E+01	.3342E+02	.1001E+01	.4634E+00	.1320E+02	.1180E+01	.8967E+00	.2013E+02
320	.1605E+01	.1640E+01	.3508E+02	.1001E+01	.4278E+00	.1392E+02	.1208E+01	.8435E+00	.2117E+02
380	.1684E+01	.1545E+01	.3664E+02	.1001E+01	.3931E+00	.1461E+02	.1235E+01	.7880E+00	.2216E+02
440	.1759E+01	.1444E+01	.3814E+02	.1001E+01	.3595E+00	.1527E+02	.1261E+01	.7311E+00	.2311E+02
520	.1854E+01	.1303E+01	.4002E+02	.1001E+01	.3165E+00	.1610E+02	.1293E+01	.6547E+00	.2430E+02
600	.1943E+01	.1159E+01	.4180E+02	.1000E+01	.2756E+00	.1689E+02	.1323E+01	.5785E+00	.2543E+02

--- MAT RU104   (441040) ENDF ID (9333)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3768E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4369E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4205E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2598E+02	.1001E+01	.6278E+00	.1576E+02	.1080E+01	.1786E+01	.2492E+02
20	.1128E+01	.1920E+01	.2683E+02	.1001E+01	.6140E+00	.1633E+02	.1115E+01	.1784E+01	.2574E+02
80	.1238E+01	.1902E+01	.2922E+02	.1001E+01	.5746E+00	.1792E+02	.1214E+01	.1764E+01	.2805E+02
140	.1339E+01	.1862E+01	.3140E+02	.1001E+01	.5368E+00	.1938E+02	.1304E+01	.1724E+01	.3015E+02
200	.1433E+01	.1802E+01	.3340E+02	.1001E+01	.4999E+00	.2074E+02	.1388E+01	.1667E+01	.3209E+02
260	.1521E+01	.1727E+01	.3528E+02	.1001E+01	.4635E+00	.2202E+02	.1467E+01	.1596E+01	.3390E+02
320	.1605E+01	.1640E+01	.3704E+02	.1001E+01	.4279E+00	.2323E+02	.1542E+01	.1514E+01	.3560E+02
380	.1684E+01	.1545E+01	.3871E+02	.1001E+01	.3933E+00	.2437E+02	.1613E+01	.1425E+01	.3722E+02
440	.1759E+01	.1443E+01	.4029E+02	.1001E+01	.3596E+00	.2547E+02	.1680E+01	.1331E+01	.3875E+02
520	.1854E+01	.1303E+01	.4229E+02	.1001E+01	.3166E+00	.2686E+02	.1765E+01	.1200E+01	.4069E+02
600	.1943E+01	.1159E+01	.4419E+02	.1000E+01	.2757E+00	.2818E+02	.1845E+01	.1067E+01	.4252E+02

--- MAT RU105   (441050) ENDF ID (9334)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4069E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2000E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4269E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2231E+02	.1001E+01	.6277E+00	.3929E-02	.1085E+01	.1859E+01	.2311E+02
20	.1128E+01	.1920E+01	.2303E+02	.1001E+01	.6139E+00	.4070E-02	.1122E+01	.1858E+01	.2386E+02
80	.1238E+01	.1902E+01	.2505E+02	.1001E+01	.5745E+00	.4467E-02	.1227E+01	.1839E+01	.2597E+02
140	.1339E+01	.1862E+01	.2689E+02	.1001E+01	.5367E+00	.4832E-02	.1323E+01	.1800E+01	.2789E+02
200	.1433E+01	.1802E+01	.2858E+02	.1001E+01	.4997E+00	.5171E-02	.1413E+01	.1741E+01	.2966E+02
260	.1521E+01	.1727E+01	.3016E+02	.1001E+01	.4634E+00	.5489E-02	.1497E+01	.1668E+01	.3131E+02
320	.1605E+01	.1640E+01	.3164E+02	.1001E+01	.4278E+00	.5790E-02	.1576E+01	.1583E+01	.3287E+02
380	.1684E+01	.1545E+01	.3304E+02	.1001E+01	.3931E+00	.6076E-02	.1652E+01	.1491E+01	.3433E+02
440	.1759E+01	.1444E+01	.3436E+02	.1001E+01	.3595E+00	.6349E-02	.1723E+01	.1393E+01	.3573E+02
520	.1854E+01	.1303E+01	.3604E+02	.1001E+01	.3165E+00	.6696E-02	.1814E+01	.1257E+01	.3749E+02
600	.1943E+01	.1159E+01	.3763E+02	.1000E+01	.2756E+00	.7025E-02	.1899E+01	.1118E+01	.3916E+02

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--- MAT RU106   (441060) ENDF ID (9335)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4095E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1460E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4241E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2165E+02	.1001E+01	.6276E+00	.1499E+02	.1086E+01	.1876E+01	.2142E+02
20	.1128E+01	.1920E+01	.2235E+02	.1001E+01	.6139E+00	.1553E+02	.1124E+01	.1875E+01	.2212E+02
80	.1238E+01	.1902E+01	.2430E+02	.1001E+01	.5745E+00	.1704E+02	.1230E+01	.1856E+01	.2405E+02
140	.1339E+01	.1862E+01	.2608E+02	.1001E+01	.5367E+00	.1843E+02	.1328E+01	.1816E+01	.2581E+02
200	.1433E+01	.1802E+01	.2771E+02	.1001E+01	.4997E+00	.1973E+02	.1418E+01	.1757E+01	.2744E+02
260	.1521E+01	.2727E+01	.2923E+02	.1001E+01	.4634E+00	.2094E+02	.1504E+01	.1684E+01	.2895E+02
320	.1605E+01	.1640E+01	.3066E+02	.1001E+01	.4278E+00	.2209E+02	.1584E+01	.1599E+01	.3037E+02
380	.1684E+01	.1545E+01	.3201E+02	.1001E+01	.3931E+00	.2318E+02	.1660E+01	.1505E+01	.3171E+02
440	.1759E+01	.1444E+01	.3330E+02	.1001E+01	.3595E+00	.2422E+02	.1733E+01	.1406E+01	.3299E+02
520	.1854E+01	.1303E+01	.3492E+02	.1001E+01	.3165E+00	.2554E+02	.1824E+01	.1269E+01	.3460E+02
600	.1943E+01	.1159E+01	.3645E+02	.1000E+01	.2756E+00	.2680E+02	.1910E+01	.1129E+01	.3612E+02

--- MAT RU96   (440960) ENDF ID (9325)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6014E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2499E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6264E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2352E+02	.7141E+01	.1487E+01	.4856E+02	.1330E+01	.1903E+01	.2452E+02
20	.1128E+01	.1920E+01	.2428E+02	.6745E+01	.1472E+01	.5100E+02	.1352E+01	.1902E+01	.2535E+02
80	.1238E+01	.1902E+01	.2642E+02	.5806E+01	.1418E+01	.5763E+02	.1420E+01	.1882E+01	.2767E+02
140	.1339E+01	.1862E+01	.2837E+02	.5132E+01	.1351E+01	.6348E+02	.1491E+01	.1841E+01	.2977E+02
200	.1433E+01	.1802E+01	.3017E+02	.4635E+01	.1276E+01	.6875E+02	.1561E+01	.1781E+01	.3170E+02
260	.1521E+01	.1727E+01	.3184E+02	.4259E+01	.1195E+01	.7358E+02	.1631E+01	.1706E+01	.3350E+02
320	.1605E+01	.1640E+01	.3341E+02	.3969E+01	.1110E+01	.7806E+02	.1699E+01	.1619E+01	.3519E+02
380	.1684E+01	.1545E+01	.3490E+02	.3742E+01	.1024E+01	.8226E+02	.1766E+01	.1524E+01	.3679E+02
440	.1759E+01	.1444E+01	.3631E+02	.3561E+01	.9390E+00	.8622E+02	.1831E+01	.1423E+01	.3830E+02
520	.1854E+01	.1303E+01	.3810E+02	.3372E+01	.8273E+00	.9120E+02	.1914E+01	.1284E+01	.4022E+02
600	.1943E+01	.1159E+01	.3979E+02	.3227E+01	.7197E+00	.9590E+02	.1994E+01	.1142E+01	.4203E+02

--- MAT RU98   (440980) ENDF ID (9327)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6014E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7998E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1401E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2372E+02	.7141E+01	.1488E+01	-.4905E+01	.4543E+01	.1673E+01	.7382E+01
20	.1128E+01	.1920E+01	.2450E+02	.6746E+01	.1473E+01	-.4394E+01	.4335E+01	.1665E+01	.8005E+01
80	.1238E+01	.1902E+01	.2666E+02	.5806E+01	.1419E+01	-.3172E+01	.3845E+01	.1626E+01	.9630E+01
140	.1339E+01	.1862E+01	.2862E+02	.5132E+01	.1352E+01	-.2289E+01	.3504E+01	.1571E+01	.1098E+02
200	.1433E+01	.1802E+01	.3044E+02	.4635E+01	.1277E+01	-.1631E+01	.3261E+01	.1502E+01	.1213E+02
260	.1521E+01	.1727E+01	.3213E+02	.4259E+01	.1196E+01	-.1130E+01	.3084E+01	.1424E+01	.1314E+02
320	.1605E+01	.1640E+01	.3372E+02	.3969E+01	.1111E+01	-.7411E+00	.2954E+01	.1338E+01	.1405E+02
380	.1684E+01	.1545E+01	.3522E+02	.3742E+01	.1025E+01	-.4332E+00	.2859E+01	.1248E+01	.1487E+02
440	.1759E+01	.1444E+01	.3664E+02	.3561E+01	.9397E+00	-.1854E+00	.2787E+01	.1156E+01	.1562E+02
520	.1854E+01	.1303E+01	.3845E+02	.3372E+01	.8280E+00	.7639E-01	.2720E+01	.1032E+01	.1655E+02
600	.1943E+01	.1159E+01	.4015E+02	.3227E+01	.7204E+00	.2820E+00	.2676E+01	.9087E+00	.1740E+02

--- MAT RU99   (440990) ENDF ID (9328)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3510E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5001E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8511E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.2830E+02	.1003E+01	.6511E+00	.2939E+02	.1038E+01	.1173E+01	.2894E+02
20	.1128E+01	.1916E+01	.2924E+02	.1003E+01	.6379E+00	.3045E+02	.1055E+01	.1165E+01	.2995E+02
80	.1238E+01	.1898E+01	.3187E+02	.1004E+01	.5997E+00	.3342E+02	.1101E+01	.1135E+01	.3278E+02
140	.1339E+01	.1858E+01	.3426E+02	.1006E+01	.5626E+00	.3615E+02	.1143E+01	.1097E+01	.3537E+02
200	.1433E+01	.1799E+01	.3647E+02	.1007E+01	.5259E+00	.3868E+02	.1183E+01	.1051E+01	.3777E+02
260	.1521E+01	.1723E+01	.3853E+02	.1008E+01	.4893E+00	.4106E+02	.1220E+01	.9983E+00	.4002E+02
320	.1604E+01	.1637E+01	.4047E+02	.1009E+01	.4532E+00	.4331E+02	.1255E+01	.9412E+00	.4214E+02
380	.1683E+01	.1541E+01	.4230E+02	.1011E+01	.4177E+00	.4544E+02	.1288E+01	.8810E+00	.4415E+02
440	.1758E+01	.1440E+01	.4405E+02	.1012E+01	.3830E+00	.4748E+02	.1320E+01	.8189E+00	.4607E+02
520	.1853E+01	.1300E+01	.4626E+02	.1013E+01	.3383E+00	.5007E+02	.1359E+01	.7347E+00	.4850E+02
600	.1941E+01	.1156E+01	.4835E+02	.1014E+01	.2955E+00	.5254E+02	.1397E+01	.6503E+00	.5081E+02

--- MAT SB121   (511210) ENDF ID (9548)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3696E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6256E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9952E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1913E+01	.2498E+02	.1004E+01	.6642E+00	.3537E+02	.1035E+01	.1128E+01	.3151E+02
20	.1128E+01	.1912E+01	.2580E+02	.1004E+01	.6513E+00	.3664E+02	.1050E+01	.1119E+01	.3261E+02
80	.1238E+01	.1893E+01	.2809E+02	.1006E+01	.6138E+00	.4021E+02	.1092E+01	.1089E+01	.3571E+02
140	.1338E+01	.1853E+01	.3017E+02	.1008E+01	.5771E+00	.4349E+02	.1131E+01	.1051E+01	.3854E+02
200	.1432E+01	.1793E+01	.3209E+02	.1010E+01	.5406E+00	.4654E+02	.1167E+01	.1006E+01	.4118E+02
260	.1520E+01	.1718E+01	.3389E+02	.1012E+01	.5040E+00	.4940E+02	.1201E+01	.9549E+00	.4364E+02
320	.1603E+01	.1631E+01	.3557E+02	.1014E+01	.4676E+00	.5210E+02	.1233E+01	.8997E+00	.4596E+02
380	.1682E+01	.1536E+01	.3716E+02	.1016E+01	.4316E+00	.5467E+02	.1263E+01	.8417E+00	.4817E+02
440	.1757E+01	.1435E+01	.3868E+02	.1017E+01	.3964E+00	.5713E+02	.1292E+01	.7820E+00	.5028E+02
520	.1851E+01	.1295E+01	.4060E+02	.1020E+01	.3508E+00	.6024E+02	.1328E+01	.7013E+00	.5295E+02
600	.1939E+01	.1152E+01	.4241E+02	.1022E+01	.3069E+00	.6320E+02	.1363E+01	.6206E+00	.5548E+02

--- MAT SB123   (511230) ENDF ID (9551)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3765E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4327E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8092E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1917E+01	.3171E+02	.1002E+01	.6371E+00	.3159E+02	.1042E+01	.1233E+01	.3164E+02
20	.1128E+01	.1916E+01	.3277E+02	.1002E+01	.6236E+00	.3272E+02	.1061E+01	.1225E+01	.3275E+02
80	.1238E+01	.1898E+01	.3574E+02	.1003E+01	.5846E+00	.3592E+02	.1112E+01	.1196E+01	.3584E+02
140	.1339E+01	.1858E+01	.3845E+02	.1003E+01	.5471E+00	.3885E+02	.1159E+01	.1157E+01	.3866E+02
200	.1433E+01	.1798E+01	.4095E+02	.1004E+01	.5102E+00	.4157E+02	.1203E+01	.1110E+01	.4129E+02
260	.1521E+01	.1723E+01	.4329E+02	.1004E+01	.4737E+00	.4413E+02	.1244E+01	.1055E+01	.4374E+02
320	.1604E+01	.1636E+01	.4549E+02	.1005E+01	.4379E+00	.4655E+02	.1283E+01	.9956E+00	.4606E+02
380	.1683E+01	.1541E+01	.4758E+02	.1005E+01	.4029E+00	.4885E+02	.1320E+01	.9325E+00	.4825E+02
440	.1758E+01	.1440E+01	.4956E+02	.1005E+01	.3689E+00	.5104E+02	.1356E+01	.8672E+00	.5035E+02
520	.1853E+01	.1299E+01	.5207E+02	.1006E+01	.3252E+00	.5383E+02	.1400E+01	.7785E+00	.5301E+02
600	.1941E+01	.1156E+01	.5444E+02	.1006E+01	.2835E+00	.5647E+02	.1441E+01	.6894E+00	.5553E+02

--- MAT SB124   (511240) ENDF ID (9552)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4546E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6500E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1105E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1850E+02	.1001E+01	.6277E+00	.3924E+01	.1037E+01	.1160E+01	.9923E+01
20	.1128E+01	.1920E+01	.1909E+02	.1001E+01	.6139E+00	.4066E+01	.1053E+01	.1151E+01	.1025E+02
80	.1238E+01	.1902E+01	.2072E+02	.1001E+01	.5745E+00	.4463E+01	.1099E+01	.1121E+01	.1115E+02
140	.1339E+01	.1862E+01	.2220E+02	.1001E+01	.5367E+00	.4827E+01	.1140E+01	.1082E+01	.1198E+02
200	.1433E+01	.1802E+01	.2356E+02	.1001E+01	.4997E+00	.5166E+01	.1179E+01	.1036E+01	.1274E+02
260	.1521E+01	.1727E+01	.2483E+02	.1001E+01	.4634E+00	.5484E+01	.1215E+01	.9835E+00	.1345E+02
320	.1605E+01	.1640E+01	.2602E+02	.1001E+01	.4278E+00	.5784E+01	.1250E+01	.9268E+00	.1411E+02
380	.1684E+01	.1545E+01	.2714E+02	.1001E+01	.3931E+00	.6070E+01	.1282E+01	.8671E+00	.1474E+02
440	.1759E+01	.1444E+01	.2821E+02	.1001E+01	.3595E+00	.6342E+01	.1313E+01	.8056E+00	.1534E+02
520	.1854E+01	.1303E+01	.2955E+02	.1001E+01	.3165E+00	.6689E+01	.1352E+01	.7224E+00	.1610E+02
600	.1943E+01	.1159E+01	.3082E+02	.1000E+01	.2756E+00	.7018E+01	.1388E+01	.6392E+00	.1681E+02

--- MAT SB125   (511250) ENDF ID (9555)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4571E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1000E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5571E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2316E+02	.1001E+01	.6277E+00	.1935E+02	.1073E+01	.1688E+01	.2248E+02
20	.1128E+01	.1920E+01	.2391E+02	.1001E+01	.6139E+00	.2005E+02	.1105E+01	.1685E+01	.2322E+02
80	.1238E+01	.1902E+01	.2602E+02	.1001E+01	.5745E+00	.2201E+02	.1196E+01	.1663E+01	.2530E+02
140	.1339E+01	.1862E+01	.2793E+02	.1001E+01	.5367E+00	.2381E+02	.1279E+01	.1624E+01	.2719E+02
200	.1433E+01	.1802E+01	.2970E+02	.1001E+01	.4997E+00	.2548E+02	.1356E+01	.1568E+01	.2894E+02
260	.1521E+01	.1727E+01	.3134E+02	.1001E+01	.4634E+00	.2704E+02	.1428E+01	.1500E+01	.3057E+02
320	.1605E+01	.1640E+01	.3289E+02	.1001E+01	.4278E+00	.2853E+02	.1496E+01	.1423E+01	.3211E+02
380	.1684E+01	.1545E+01	.3435E+02	.1001E+01	.3931E+00	.2993E+02	.1561E+01	.1338E+01	.3356E+02
440	.1759E+01	.1444E+01	.3574E+02	.1001E+01	.3595E+00	.3128E+02	.1623E+01	.1249E+01	.3494E+02
520	.1854E+01	.1303E+01	.3749E+02	.1001E+01	.3165E+00	.3299E+02	.1701E+01	.1126E+01	.3668E+02
600	.1943E+01	.1159E+01	.3915E+02	.1000E+01	.2756E+00	.3461E+02	.1774E+01	.1001E+01	.3834E+02

--- MAT SB126   (511260) ENDF ID (9556)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4595E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5800E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1040E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2355E+02	.1001E+01	.6277E+00	.8083E+01	.1040E+01	.1199E+01	.1492E+02
20	.1128E+01	.1920E+01	.2432E+02	.1001E+01	.6139E+00	.8374E+01	.1057E+01	.1191E+01	.1542E+02
80	.1238E+01	.1902E+01	.2646E+02	.1001E+01	.5745E+00	.9192E+01	.1106E+01	.1161E+01	.1683E+02
140	.1339E+01	.1862E+01	.2841E+02	.1001E+01	.5367E+00	.9942E+01	.1151E+01	.1122E+01	.1811E+02
200	.1433E+01	.1802E+01	.3021E+02	.1001E+01	.4997E+00	.1064E+02	.1192E+01	.1075E+01	.1929E+02
260	.1521E+01	.1727E+01	.3189E+02	.1001E+01	.4634E+00	.1129E+02	.1231E+01	.1022E+01	.2040E+02
320	.1605E+01	.164CE+01	.3346E+02	.1001E+01	.4278E+00	.1191E+02	.1268E+01	.9638E+00	.2144E+02
380	.1684E+01	.1545E+01	.3495E+02	.1001E+01	.3931E+00	.1250E+02	.1303E+01	.9022E+00	.2243E+02
440	.1759E+01	.1444E+01	.3637E+02	.1001E+01	.3595E+00	.1306E+02	.1336E+01	.8387E+00	.2336E+02
520	.1854E+01	.1303E+01	.3816E+02	.1001E+01	.3165E+00	.1378E+02	.1378E+01	.7525E+00	.2455E+02
600	.1943E+01	.1159E+01	.3985E+02	.1000E+01	.2756E+00	.1446E+02	.1417E+01	.6662E+00	.2568E+02

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--- MAT SE74   (340740) ENDF ID (9089)
REACTION TYPE 102 IS N-GAMMA
SIGMA ZERO .5172E+02 BARNS

NEUTRON
TEMP(C)

	G	GE	S
0	.8151E-02	.7604E+00	.1305E+02
20	.7890E-02	.7467E+00	.1347E+02
80	.7074E-02	.7055E+00	.1465E+02
140	.6308E-02	.6637E+00	.1574E+02
200	.5632E-02	.6213E+00	.1674E+02
260	.5049E-02	.5784E+00	.1767E+02
320	.4549E-02	.5355E+00	.1855E+02
380	.4120E-02	.4931E+00	.1939E+02
440	.3750E-02	.4516E+00	.2019E+02
520	.3333E-02	.3980E+00	.2120E+02
600	.2985E-02	.3468E+00	.2216E+02

--- MAT SE76   (340760) ENDF ID (9091)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1750E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8500E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8675E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.6353E+02	.1001E+01	.6276E+00	.7937E-01	.1003E+01	.6537E+00	.1359E+01
20	.1128E+01	.1919E+01	.6574E+02	.1001E+01	.6139E+00	.8225E-01	.1004E+01	.6403E+00	.1407E+01
80	.1238E+01	.1901E+01	.7192E+02	.1001E+01	.5745E+00	.9033E-01	.1006E+01	.6012E+00	.1539E+01
140	.1339E+01	.1861E+01	.7759E+02	.1001E+01	.5367E+00	.9773E-01	.1008E+01	.5634E+00	.1661E+01
200	.1433E+01	.1802E+01	.8284E+02	.1001E+01	.4997E+00	.1046E+00	.1010E+01	.5260E+00	.1774E+01
260	.1521E+01	.1727E+01	.8775E+02	.1001E+01	.4634E+00	.1110E+00	.1012E+01	.4889E+00	.1879E+01
320	.1605E+01	.1640E+01	.9239E+02	.1001E+01	.4278E+00	.1171E+00	.1013E+01	.4522E+00	.1978E+01
380	.1684E+01	.1544E+01	.9679E+02	.1001E+01	.3931E+00	.1229E+00	.1015E+01	.4163E+00	.2073E+01
440	.1759E+01	.1443E+01	.1010E+03	.1001E+01	.3595E+00	.1284E+00	.1016E+01	.3814E+00	.2163E+01
520	.1854E+01	.1302E+01	.1063E+03	.1001E+01	.3165E+00	.1355E+00	.1018E+01	.3364E+00	.2277E+01
600	.1943E+01	.1159E+01	.1113E+03	.1000E+01	.2756E+00	.1425E+00	.1019E+01	.2934E+00	.2386E+01

--- MAT SE77   (340770) ENDF ID (9092)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2285E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4200E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4429E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5805E+02	.1001E+01	.6277E+00	.4561E+00	.1006E+01	.6944E+00	.3428E+01
20	.1128E+01	.1919E+01	.6006E+02	.1001E+01	.6139E+00	.4725E+00	.1008E+01	.6813E+00	.3547E+01
80	.1238E+01	.1901E+01	.6569E+02	.1001E+01	.5745E+00	.5187E+00	.1013E+01	.6430E+00	.3882E+01
140	.1339E+01	.1861E+01	.7084E+02	.1001E+01	.5367E+00	.5611E+00	.1019E+01	.6051E+00	.4188E+01
200	.1433E+01	.1802E+01	.7562E+02	.1001E+01	.4997E+00	.6004E+00	.1023E+01	.5669E+00	.4472E+01
260	.1521E+01	.1727E+01	.8009E+02	.1001E+01	.4634E+00	.6374E+00	.1028E+01	.5286E+00	.4737E+01
320	.1605E+01	.1640E+01	.8431E+02	.1001E+01	.4278E+00	.6723E+00	.1032E+01	.4904E+00	.4988E+01
380	.1684E+01	.1544E+01	.8831E+02	.1001E+01	.3931E+00	.7055E+00	.1036E+01	.4525E+00	.5226E+01
440	.1759E+01	.1443E+01	.9212E+02	.1001E+01	.3595E+00	.7372E+00	.1040E+01	.4154E+00	.5453E+01
520	.1854E+01	.1302E+01	.9695E+02	.1001E+01	.3165E+00	.7776E+00	.1045E+01	.3674E+00	.5740E+01
600	.1943E+01	.1159E+01	.1015E+03	.1000E+01	.2757E+00	.8161E+00	.1049E+01	.3212E+00	.6014E+01

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--- MAT SE78   (340780) ENDF ID (9094)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2495E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4000E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2895E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3424E+02	.1001E+01	.6279E+00	.1190E+02	.1077E+01	.1741E+01	.3116E+02
20	.1128E+01	.1919E+01	.3540E+02	.1001E+01	.6141E+00	.1232E+02	.1111E+01	.1739E+01	.3221E+02
80	.1238E+01	.1901E+01	.3862E+02	.1001E+01	.5747E+00	.1353E+02	.1205E+01	.1718E+01	.3515E+02
140	.1339E+01	.1861E+01	.4156E+02	.1001E+01	.5369E+00	.1463E+02	.1293E+01	.1678E+01	.3784E+02
200	.1433E+01	.1802E+01	.4429E+02	.1001E+01	.4999E+00	.1566E+02	.1374E+01	.1622E+01	.4033E+02
260	.1521E+01	.1727E+01	.4683E+02	.1001E+01	.4636E+00	.1662E+02	.1450E+01	.1553E+01	.4266E+02
320	.1605E+01	.1640E+01	.4922E+02	.1001E+01	.4280E+00	.1753E+02	.1521E+01	.1473E+01	.4484E+02
380	.1684E+01	.1545E+01	.5149E+02	.1001E+01	.3933E+00	.1840E+02	.1589E+01	.1386E+01	.4692E+02
440	.1759E+01	.1443E+01	.5365E+02	.1001E+01	.3597E+00	.1923E+02	.1654E+01	.1294E+01	.4889E+02
520	.1854E+01	.1303E+01	.5638E+02	.1001E+01	.3167E+00	.2028E+02	.1736E+01	.1167E+01	.5139E+02
600	.1943E+01	.1159E+01	.5897E+02	.1000E+01	.2758E+00	.2127E+02	.1812E+01	.1037E+01	.5376E+02

--- MAT SE80   (340800) ENDF ID (9097)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6753E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6101E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1285E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.2003E+03	.1001E+01	.6277E+00	.1397E+01	.1047E+01	.1306E+01	.1059E+03
20	.1128E+01	.1919E+01	.2074E+03	.1001E+01	.6140E+00	.1447E+01	.1068E+01	.1300E+01	.1097E+03
80	.1238E+01	.1901E+01	.2275E+03	.1001E+01	.5746E+00	.1588E+01	.1126E+01	.1271E+01	.1203E+03
140	.1339E+01	.1861E+01	.2458E+03	.1001E+01	.5367E+00	.1718E+01	.1179E+01	.1232E+01	.1300E+03
200	.1433E+01	.1801E+01	.2629E+03	.1001E+01	.4998E+00	.1838E+01	.1228E+01	.1184E+01	.1390E+03
260	.1521E+01	.1726E+01	.2789E+03	.1001E+01	.4635E+00	.1952E+01	.1274E+01	.1127E+01	.1474E+03
320	.1605E+01	.1639E+01	.2940E+03	.1001E+01	.4279E+00	.2058E+01	.1318E+01	.1064E+01	.1554E+03
380	.1684E+01	.1544E+01	.3083E+03	.1001E+01	.3932E+00	.2160E+01	.1360E+01	.9978E+00	.1630E+03
440	.1759E+01	.1443E+01	.3220E+03	.1001E+01	.3596E+00	.2257E+01	.1399E+01	.9286E+00	.1703E+03
520	.1854E+01	.1302E+01	.3394E+03	.1001E+01	.3166E+00	.2380E+01	.1449E+01	.8343E+00	.1794E+03
600	.1942E+01	.1158E+01	.3559E+03	.1000E+01	.2757E+00	.2498E+01	.1495E+01	.7394E+00	.1882E+03

--- MAT SE82   (340820) ENDF ID (9100)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2882E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4500E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2927E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2452E+02	.1001E+01	.6277E+00	.1563E+01	.1088E+01	.1900E+01	.2417E+02
20	.1128E+01	.1920E+01	.2532E+02	.1001E+01	.6140E+00	.1619E+01	.1126E+01	.1899E+01	.2496E+02
80	.1238E+01	.1902E+01	.2756E+02	.1001E+01	.5745E+00	.1777E+01	.1235E+01	.1881E+01	.2717E+02
140	.1339E+01	.1862E+01	.2960E+02	.1001E+01	.5368E+00	.1923E+01	.1334E+01	.1841E+01	.2918E+02
200	.1433E+01	.1802E+01	.3149E+02	.1001E+01	.4998E+00	.2057E+01	.1427E+01	.1782E+01	.3103E+02
260	.1521E+01	.1727E+01	.3324E+02	.1001E+01	.4635E+00	.2184E+01	.1513E+01	.1708E+01	.3276E+02
320	.1605E+01	.1640E+01	.3489E+02	.1001E+01	.4279E+00	.2304E+01	.1595E+01	.1622E+01	.3439E+02
380	.1684E+01	.1545E+01	.3645E+02	.1001E+01	.3932E+00	.2417E+01	.1673E+01	.1527E+01	.3593E+02
440	.1759E+01	.1444E+01	.3793E+02	.1001E+01	.3596E+00	.2526E+01	.1747E+01	.1427E+01	.3739E+02
520	.1854E+01	.1303E+01	.3981E+02	.1001E+01	.3166E+00	.2664E+01	.1841E+01	.1288E+01	.3924E+02
600	.1943E+01	.1159E+01	.4158E+02	.1000E+01	.2757E+00	.2796E+01	.1928E+01	.1146E+01	.4098E+02

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--- MAT SI-NAT   (140000) ENDF ID (1314)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2042E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1600E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2202E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1879E+02	.1004E+01	.6317E+00	.1095E+00	.1083E+01	.1826E+01	.1744E+02
20	.1128E+01	.1920E+01	.1939E+02	.1004E+01	.6179E+00	.1133E+00	.1119E+01	.1825E+01	.1799E+02
80	.1238E+01	.1902E+01	.2105E+02	.1004E+01	.5780E+00	.1237E+00	.1221E+01	.1805E+01	.1953E+02
140	.1339E+01	.1862E+01	.2256E+02	.1004E+01	.5398E+00	.1331E+00	.1315E+01	.1766E+01	.2093E+02
200	.1433E+01	.1802E+01	.2395E+02	.1005E+01	.5025E+00	.1418E+00	.1402E+01	.1708E+01	.2222E+02
260	.1521E+01	.1727E+01	.2524E+02	.1005E+01	.4658E+00	.1500E+00	.1484E+01	.1636E+01	.2342E+02
320	.1605E+01	.1640E+01	.2645E+02	.1005E+01	.4300E+00	.1578E+00	.1561E+01	.1552E+01	.2454E+02
380	.1684E+01	.1545E+01	.2759E+02	.1005E+01	.3951E+03	.1652E+00	.1634E+01	.1461E+01	.2560E+02
440	.1759E+01	.1444E+01	.2868E+02	.1005E+01	.3612E+00	.1723E+00	.1704E+01	.1365E+01	.2661E+02
520	.1854E+01	.1303E+01	.3005E+02	.1005E+01	.3180E+00	.1816E+00	.1792E+01	.1231E+01	.2788E+02
600	.1943E+01	.1159E+01	.3134E+02	.1005E+01	.2770E+00	.1906E+00	.1875E+01	.1095E+01	.2908E+02

--- MAT SM144   (621440) ENDF ID (9803)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4708E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6998E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5408E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.6307E+02	.7141E+01	.1486E+01	.3945E+02	.1872E+01	.1864E+01	.6002E+02
20	.1128E+01	.1920E+01	.6526E+02	.6745E+01	.1471E+01	.4156E+02	.1855E+01	.1862E+01	.6220E+02
80	.1238E+01	.1902E+01	.7140E+02	.5806E+01	.1416E+01	.4727E+02	.1829E+01	.1839E+01	.6828E+02
140	.1339E+01	.1862E+01	.7702E+02	.5132E+01	.1350E+01	.5227E+02	.1830E+01	.1795E+01	.7382E+02
200	.1433E+01	.1802E+01	.8224E+02	.4634E+01	.1274E+01	.5675E+02	.1848E+01	.1734E+01	.7894E+02
260	.1521E+01	.1727E+01	.8711E+02	.4259E+01	.1193E+01	.6085E+02	.1876E+01	.1658E+01	.8371E+02
320	.1605E+01	.1640E+01	.9171E+02	.3969E+01	.1108E+01	.6463E+02	.1911E+01	.1571E+01	.8821E+02
380	.1684E+01	.1545E+01	.9608E+02	.3741E+01	.1023E+01	.6817E+02	.1950E+01	.1477E+01	.9247E+02
440	.1759E+01	.1444E+01	.1002E+03	.3560E+01	.9372E+00	.7150E+02	.1992E+01	.1378E+01	.9652E+02
520	.1854E+01	.1303E+01	.1055E+03	.3371E+01	.8257E+00	.7567E+02	.2050E+01	.1241E+01	.1017E+03
600	.1943E+01	.1159E+01	.1105E+03	.3226E+01	.7183E+00	.7960E+02	.2109E+01	.1102E+01	.1065E+03

--- MAT SM147   (621470) ENDF ID (9806)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1063E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6401E+02 BARNS			REACTION TYPE 103 IS (N,P) SIGMA ZERO .9335E-06 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.9044E+00	.8625E-01	.8769E+04	.9961E+00	.5701E+00	.1238E+02	.1118E+01	.2264E+01	.2891E+02
20	.9079E+00	.6615E-01	.9085E+04	.9949E+00	.5555E+00	.1282E+02	.1165E+01	.2269E+01	.2986E+02
80	.9049E+00	.2881E-01	.9972E+04	.9911E+00	.5143E+00	.1408E+02	.1297E+01	.2263E+01	.3250E+02
140	.8875E+00	.1297E-01	.1079E+05	.9875E+00	.4760E+00	.1524E+02	.1419E+01	.2228E+01	.3490E+02
200	.8614E+00	.6597E-02	.1154E+05	.9839E+00	.4396E+00	.1632E+02	.1533E+01	.2167E+01	.3711E+02
260	.8302E+00	.3928E-02	.1225E+05	.9804E+00	.4047E+00	.1733E+02	.1642E+01	.2085E+01	.3917E+02
320	.7967E+00	.2705E-02	.1293E+05	.9770E+00	.3713E+00	.1829E+02	.1745E+01	.1986E+01	.4110E+02
380	.7623E+00	.2076E-02	.1356E+05	.9736E+00	.3393E+00	.1920E+02	.1844E+01	.1876E+01	.4293E+02
440	.7282E+00	.1710E-02	.1417E+05	.9703E+00	.3087E+00	.2007E+02	.1938E+01	.1758E+01	.4467E+02
520	.6843E+00	.1402E-02	.1495E+05	.9658E+00	.2702E+00	.2117E+02	.2058E+01	.1591E+01	.4686E+02
600	.6428E+00	.1185E-02	.1568E+05	.9613E+00	.2341E+00	.2223E+02	.2170E+01	.1419E+01	.4893E+02

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	REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .2461E-04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6412E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .6401E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1136E+01	.2466E+01	.3633E+02	.9960E+00	.5693E+00	.2690E+02	.9961E+00	.5701E+00	.1238E+02
20	.1187E+01	.2475E+01	.3754E+02	.9947E+00	.5547E+00	.2787E+02	.9949E+00	.5555E+00	.1282E+02
80	.1331E+01	.2476E+01	.4090E+02	.9910E+00	.5135E+00	.3060E+02	.9911E+00	.5143E+00	.1408E+02
140	.1466E+01	.2443E+01	.4396E+02	.9873E+00	.4752E+00	.3310E+02	.9875E+00	.4760E+00	.1524E+02
200	.1592E+01	.2381E+01	.4679E+02	.9837E+00	.4389E+00	.3543E+02	.9839E+00	.4396E+00	.1632E+02
260	.1713E+01	.2295E+01	.4942E+02	.9802E+00	.4041E+00	.3762E+02	.9804E+00	.4047E+00	.1733E+02
320	.1828E+01	.2190E+01	.5189E+02	.9767E+00	.3707E+00	.3969E+02	.9770E+00	.3713E+00	.1829E+02
380	.1938E+01	.2071E+01	.5422E+02	.9733E+00	.3387E+00	.4166E+02	.9736E+00	.3393E+00	.1920E+02
440	.2043E+01	.1943E+01	.5644E+02	.9699E+00	.3082E+00	.4354E+02	.9703E+00	.3087E+00	.2007E+02
520	.2178E+01	.1761E+01	.5925E+02	.9653E+00	.2697E+00	.4593E+02	.9658E+00	.2702E+00	.2117E+02
600	.2305E+01	.1573E+01	.6190E+02	.9608E+00	.2337E+00	.4820E+02	.9613E+00	.2341E+00	.2223E+02

--- MAT SM148   (621480) ENDF ID (9807)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5116E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2700E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7816E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.7653E+02	.1001E+01	.6277E+00	.1051E+02	.1059E+01	.1474E+01	.5372E+02
20	.1128E+01	.1920E+01	.7920E+02	.1001E+01	.6139E+00	.1089E+02	.1084E+01	.1469E+01	.5561E+02
80	.1238E+01	.1902E+01	.8671E+02	.1001E+01	.5745E+00	.1195E+02	.1156E+01	.1443E+01	.6088E+02
140	.1339E+01	.1862E+01	.9357E+02	.1001E+01	.5367E+00	.1293E+02	.1222E+01	.1404E+01	.6572E+02
200	.1433E+01	.1802E+01	.9995E+02	.1001E+01	.4997E+00	.1384E+02	.1284E+01	.1352E+01	.7020E+02
260	.1521E+01	.1727E+01	.1059E+03	.1001E+01	.4634E+00	.1469E+02	.1342E+01	.1291E+01	.7440E+02
320	.1605E+01	.1640E+01	.1115E+03	.1001E+01	.4278E+00	.1549E+02	.1396E+01	.1221E+01	.7837E+02
380	.1684E+01	.1545E+01	.1169E+03	.1001E+01	.3931E+00	.1626E+02	.1448E+01	.1147E+01	.8213E+02
440	.1759E+01	.1444E+01	.1220E+03	.1001E+01	.3595E+00	.1699E+02	.1497E+01	.1069E+01	.8572E+02
520	.1854E+01	.1303E+01	.1285E+03	.1001E+01	.3165E+00	.1792E+02	.1559E+01	.9621E+00	.9027E+02
600	.1943E+01	.1159E+01	.1346E+03	.1000E+01	.2756E+00	.1880E+02	.1617E+01	.8539E+00	.9459E+02

--- MAT SM149   (621490) ENDF ID (1319)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1359E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3933E+05 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3947E+05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.2575E+01	.2551E+01	.4577E+01	.1612E+01	.8156E+00	-.8489E+00	.1615E+01	.8216E+00	-.8303E+00
20	.2841E+01	.2197E+01	.4013E+01	.1708E+01	.6784E+00	-.1121E+01	.1712E+01	.6836E+00	-.1103E+01
80	.3573E+01	.1409E+01	.2695E+01	.1961E+01	.3919E+00	-.1746E+01	.1967E+01	.3954E+00	-.1730E+01
140	.4173E+01	.9436E+00	.1872E+01	.2152E+01	.2374E+00	-.2143E+01	.2159E+01	.2398E+00	-.2129E+01
200	.4638E+01	.6667E+00	.1406E+01	.2285E+01	.1533E+00	-.2388E+01	.2293E+01	.1551E+00	-.2375E+01
260	.4979E+01	.4939E+00	.1186E+01	.2370E+01	.1052E+00	-.2534E+01	.2379E+01	.1066E+00	-.2521E+01
320	.5217E+01	.3796E+00	.1138E+01	.2415E+01	.7601E-01	-.2611E+01	.2425E+01	.7705E-01	-.2598E+01
380	.5372E+01	.2999E+00	.1212E+01	.2431E+01	.5723E-01	-.2641E+01	.2441E+01	.5807E-01	-.2628E+01
440	.5461E+01	.2418E+00	.1375E+01	.2426E+01	.4452E-01	-.2639E+01	.2435E+01	.4520E-01	-.2625E+01
520	.5503E+01	.1854E+00	.1685E+01	.2392E+01	.3310E-01	-.2601E+01	.2402E+01	.3362E-01	-.2586E+01
600	.5481E+01	.1444E+00	.2065E+01	.2340E+01	.2538E-01	-.2537E+01	.2350E+01	.2579E-01	-.2521E+01

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--- MAT SM150 (621500) ENDF ID (9809)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6991E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1020E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1090E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1082E+01	.1784E+01	.7405E+02	.9958E+00	.5562E+00	.2867E+01	.1001E+01	.6349E+00	.7432E+01
20	.1120E+01	.1779E+01	.7664E+02	.9943E+00	.5411E+00	.2973E+01	.1002E+01	.6205E+00	.7698E+01
80	.1225E+01	.1750E+01	.8390E+02	.9901E+00	.4988E+00	.3271E+01	.1005E+01	.5791E+00	.8443E+01
140	.1321E+01	.1703E+01	.9055E+02	.9859E+00	.4597E+00	.3547E+01	.1007E+01	.5395E+00	.9127E+01
200	.1410E+01	.1639E+01	.9671E+02	.9817E+00	.4229E+00	.3804E+01	.1009E+01	.5009E+00	.9763E+01
260	.1492E+01	.1563E+01	.1025E+03	.9776E+00	.3878E+00	.4047E+01	.1011E+01	.4632E+00	.1036E+02
320	.1569E+01	.1477E+01	.1079E+03	.9735E+00	.3545E+00	.4277E+01	.1012E+01	.4265E+00	.1093E+02
380	.1642E+01	.1385E+01	.1131E+03	.9694E+00	.3228E+00	.4496E+01	.1013E+01	.3909E+00	.1146E+02
440	.1710E+01	.1289E+01	.1181E+03	.9654E+00	.2927E+00	.4707E+01	.1013E+01	.3567E+00	.1198E+02
520	.1796E+01	.1158E+01	.1243E+03	.9600E+00	.2551E+00	.4975E+01	.1014E+01	.3130E+00	.1263E+02
600	.1875E+01	.1026E+01	.1303E+03	.9545E+00	.2202E+00	.5231E+01	.1013E+01	.2719E+00	.1325E+02

--- MAT SM151 (621510) ENDF ID (9810)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1674E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1500E+05 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1074E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.9100E+00	.5461E+00	.2090E+02	.9605E+00	.1152E+00	-.7537E+00	.1136E+01	.2469E+01	.3642E+02
20	.9172E+00	.5312E+00	.2165E+02	.9279E+00	.1089E+00	-.7139E+00	.1187E+01	.2477E+01	.3763E+02
80	.9322E+00	.4902E+00	.2374E+02	.8427E+00	.9438E-01	-.6059E+00	.1331E+01	.2478E+01	.4100E+02
140	.9404E+00	.4528E+00	.2567E+02	.7725E+00	.8371E-01	-.5123E+00	.1466E+01	.2446E+01	.4407E+02
200	.9446E+00	.4177E+00	.2748E+02	.7138E+00	.7521E-01	-.4305E+00	.1593E+01	.2384E+01	.4690E+02
260	.9462E+00	.3842E+00	.2928E+02	.6640E+00	.6802E-01	-.3579E+00	.1714E+01	.2298E+01	.4954E+02
320	.9461E+00	.3520E+00	.3080E+02	.6169E+00	.6169E-01	-.2927E+00	.1829E+01	.2193E+01	.5201E+02
380	.9449E+00	.3213E+00	.3235E+02	.5842E+00	.5598E-01	-.2335E+00	.1939E+01	.2074E+01	.5436E+02
440	.9429E+00	.2919E+00	.3384E+02	.5518E+00	.5074E-01	-.1791E+00	.2045E+01	.1945E+01	.5658E+02
520	.9395E+00	.2548E+00	.3574E+02	.5145E+00	.4432E-01	-.1131E+00	.2179E+01	.1763E+01	.5939E+02
600	.9354E+00	.2202E+00	.3756E+02	.4826E+00	.3842E-01	-.5367E-01	.2306E+01	.1574E+01	.6205E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1502E+05 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1500E+05 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9604E+00	.1156E+00	-.7295E+00	.9605E+00	.1152E+00	-.7537E+00
20	.9279E+00	.1094E+00	-.6890E+00	.9279E+00	.1089E+00	-.7139E+00
80	.8428E+00	.9482E-01	-.5787E+00	.8427E+00	.9438E-01	-.6059E+00
140	.7727E+00	.8412E-01	-.4831E+00	.7725E+00	.8371E-01	-.5123E+00
200	.7140E+00	.7560E-01	-.3994E+00	.7138E+00	.7521E-01	-.4305E+00
260	.6643E+00	.6837E-01	-.3250E+00	.6640E+00	.6802E-01	-.3579E+00
320	.6216E+00	.6201E-01	-.2581E+00	.6212E+00	.6169E-01	-.2927E+00
380	.5846E+00	.5627E-01	-.1971E+00	.5842E+00	.5598E-01	-.2335E+00
440	.5523E+00	.5100E-01	-.1412E+00	.5518E+00	.5074E-01	-.1791E+00
520	.5150E+00	.4455E-01	-.7317E-01	.5145E+00	.4432E-01	-.1131E+00
600	.4831E+00	.3862E-01	-.1175E-01	.4826E+00	.3842E-01	-.5367E-01

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--- MAT SM152 (621520) ENDF ID (9811)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2159E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2060E+03 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .1032E-04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1119E+01	.2608E+01	.2899E+04	.1004E+01	.6645E+00	.1537E+02	.1136E+01	.2462E+01	.3619E+02
20	.1164E+01	.2632E+01	.3003E+04	.1004E+01	.6516E+00	.1592E+02	.1186E+01	.2471E+01	.3739E+02
80	.1295E+01	.2675E+01	.3296E+04	.1006E+01	.6141E+00	.1748E+02	.1330E+01	.2472E+01	.4073E+02
140	.1418E+01	.2680E+01	.3565E+04	.1008E+01	.5775E+00	.1890E+02	.1465E+01	.2439E+01	.4378E+02
200	.1537E+01	.2649E+01	.3815E+04	.1010E+01	.5409E+00	.2022E+02	.1591E+01	.2377E+01	.4659E+02
260	.1653E+01	.2587E+01	.4019E+04	.1012E+01	.5043E+00	.2146E+02	.1712E+01	.2291E+01	.4921E+02
320	.1765E+01	.2499E+01	.4271E+04	.1014E+01	.4678E+00	.2264E+02	.1826E+01	.2186E+01	.5167E+02
380	.1876E+01	.2391E+01	.4481E+04	.1016E+01	.4318E+00	.2375E+02	.1936E+01	.2068E+01	.5400E+02
440	.1984E+01	.2266E+01	.4683E+04	.1018E+01	.3966E+00	.2481E+02	.2041E+01	.1939E+01	.5621E+02
520	.2124E+01	.2081E+01	.4938E+04	.1020E+01	.3509E+00	.2616E+02	.2175E+01	.1758E+01	.5900E+02
600	.2261E+01	.1880E+01	.5181E+04	.1022E+01	.3070E+00	.2745E+02	.2302E+01	.1569E+01	.6164E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .2082E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2060E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1005E+01	.6847E+00	.4527E+02	.1004E+01	.6645E+00	.1537E+02
20	.1006E+01	.6721E+00	.4689E+02	.1004E+01	.6516E+00	.1592E+02
80	.1009E+01	.6355E+00	.5147E+02	.1006E+01	.6141E+00	.1748E+02
140	.1012E+01	.5993E+00	.5566E+02	.1008E+01	.5775E+00	.1890E+02
200	.1016E+01	.5627E+00	.5956E+02	.1010E+01	.5409E+00	.2022E+02
260	.1019E+01	.5259E+00	.6322E+02	.1012E+01	.5043E+00	.2146E+02
320	.1022E+01	.4889E+00	.6668E+02	.1014E+01	.4678E+00	.2264E+02
380	.1025E+01	.4522E+00	.6997E+02	.1016E+01	.4318E+00	.2375E+02
440	.1028E+01	.4160E+00	.7311E+02	.1018E+01	.3966E+00	.2481E+02
520	.1032E+01	.3688E+00	.7709E+02	.1020E+01	.3509E+00	.2616E+02
600	.1035E+01	.3233E+00	.8088E+02	.1022E+01	.3070E+00	.2745E+02

--- MAT SM153 (621530) ENDF ID (9812)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5231E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3300E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3352E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5354E+02	.1001E+01	.6280E+00	.8954E+01	.1003E+01	.6481E+00	.9649E+01
20	.1128E+01	.1920E+01	.5539E+02	.1001E+01	.6142E+00	.9276E-01	.1003E+01	.6346E+00	.9995E+01
80	.1238E+01	.1902E+01	.6057E+02	.1001E+01	.5748E+00	.1018E+02	.1005E+01	.5955E+00	.1097E+02
140	.1339E+01	.1862E+01	.6530E+02	.1001E+01	.5370E+00	.1101E+02	.1007E+01	.5576E+00	.1186E+02
200	.1433E+01	.1802E+01	.6969E+02	.1001E+01	.5000E+00	.1179E+02	.1008E+01	.5203E+00	.1269E+02
260	.1521E+01	.1727E+01	.7380E+02	.1001E+01	.4636E+00	.1251E+02	.1009E+01	.4834E+00	.1347E+02
320	.1605E+01	.1640E+01	.7767E+02	.1001E+01	.4280E+00	.1320E+02	.1011E+01	.4470E+00	.1420E+02
380	.1684E+01	.1545E+01	.8134E+02	.1001E+01	.3934E+00	.1385E+02	.1012E+01	.4113E+00	.1490E+02
440	.1759E+01	.1444E+01	.8484E+02	.1001E+01	.3597E+00	.1447E+02	.1013E+01	.3766E+00	.1557E+02
520	.1854E+01	.1303E+01	.8927E+02	.1001E+01	.3167E+00	.1526E+02	.1014E+01	.3321E+00	.1641E+02
600	.1943E+01	.1159E+01	.9348E+02	.1001E+01	.2758E+00	.1601E+02	.1015E+01	.2896E+00	.1722E+02

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--- MAT SM154   (621540) ENDP ID (9813)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3254E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5500E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8754E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.7072E+02	.1001E+01	.6279E+00	.6199E+01	.1034E+01	.1108E+01	.3018E+02
20	.1128E+01	.1918E+01	.7318E+02	.1001E+01	.6142E+00	.6422E+01	.1048E+01	.1099E+01	.3124E+02
80	.1238E+01	.1900E+01	.8010E+02	.1001E+01	.5748E+00	.7049E+01	.1089E+01	.1067E+01	.3420E+02
140	.1339E+01	.1860E+01	.8643E+02	.1001E+01	.5370E+00	.7625E+01	.1127E+01	.1029E+01	.3692E+02
200	.1433E+01	.1801E+01	.9230E+02	.1001E+01	.5000E+00	.8160E+01	.1162E+01	.9835E+00	.3943E+02
260	.1521E+01	.1726E+01	.9779E+02	.1001E+01	.4637E+00	.8662E+01	.1195E+01	.9328E+00	.4179E+02
320	.1604E+01	.1639E+01	.1030E+03	.1001E+01	.4281E+00	.9137E+01	.1225E+01	.8781E+00	.4402E+02
380	.1683E+01	.1543E+01	.1079E+03	.1001E+01	.3934E+00	.9588E+01	.1255E+01	.8208E+00	.4613E+02
440	.1759E+01	.1442E+01	.1126E+03	.1001E+01	.3598E+00	.1002E+02	.1283E+01	.7621E+00	.4815E+02
520	.1853E+01	.1302E+01	.1185E+03	.1001E+01	.3168E+00	.1057E+02	.1318E+01	.6828E+00	.5070E+02
600	.1942E+01	.1156E+01	.1242E+03	.1000E+01	.2759E+00	.1109E+02	.1351E+01	.6037E+00	.5313E+02

--- MAT SN112   (501120) ENDF ID (9513)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5195E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1147E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6342E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2290E+02	.4642E+01	.1138E+01	.2445E+02	.1731E+01	.1778E+01	.2318E+02
20	.1128E+01	.1919E+01	.2364E+02	.4408E+01	.1124E+01	.2573E+02	.1721E+01	.1775E+01	.2402E+02
80	.1238E+01	.1901E+01	.2572E+02	.3851E+01	.1076E+01	.2922E+02	.1710E+01	.1752E+01	.2635E+02
140	.1339E+01	.1861E+01	.2761E+02	.3451E+01	.1021E+01	.3229E+02	.1721E+01	.1709E+01	.2845E+02
200	.1433E+01	.1802E+01	.2935E+02	.3156E+01	.9613E+00	.3504E+02	.1745E+01	.1650E+01	.3038E+02
260	.1521E+01	.1727E+01	.3097E+02	.2933E+01	.8983E+00	.3755E+02	.1777E+01	.1577E+01	.3216E+02
320	.1605E+01	.1640E+01	.3250E+02	.2762E+01	.8336E+00	.3987E+02	.1814E+01	.1494E+01	.3383E+02
380	.1684E+01	.1544E+01	.3394E+02	.2627E+01	.7685E+00	.4205E+02	.1854E+01	.1404E+01	.3541E+02
440	.1759E+01	.1443E+01	.3531E+02	.2519E+01	.7041E+00	.4410E+02	.1896E+01	.1309E+01	.3690E+02
520	.1854E+01	.1302E+01	.3704E+02	.2407E+01	.6203E+00	.4666E+02	.1954E+01	.1179E+01	.3878E+02
600	.1943E+01	.1159E+01	.3868E+02	.2321E+01	.5398E+00	.4908E+02	.2011E+01	.1047E+01	.4056E+02

--- MAT SN114   (501140) ENDF ID (9516)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5663E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1107E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6770E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1785E+02	.7101E+01	.1481E+01	-.2791E+01	.2072E+01	.1848E+01	.1447E+02
20	.1128E+01	.1920E+01	.1841E+02	.6709E+01	.1466E+01	-.2208E+01	.2040E+01	.1845E+01	.1504E+02
80	.1238E+01	.1902E+01	.1998E+02	.5775E+01	.1412E+01	-.7836E+00	.1980E+01	.1822E+01	.1658E+02
140	.1339E+01	.1862E+01	.2140E+02	.5105E+01	.1345E+01	.2880E+00	.1955E+01	.1777E+01	.1795E+02
200	.1433E+01	.1802E+01	.2270E+02	.4611E+01	.1270E+01	.1121E+01	.1953E+01	.1715E+01	.1917E+02
260	.1521E+01	.1727E+01	.2392E+02	.4238E+01	.1189E+01	.1787E+01	.1966E+01	.1639E+01	.2030E+02
320	.1605E+01	.1640E+01	.2506E+02	.3950E+01	.1105E+01	.2334E+01	.1988E+01	.1553E+01	.2134E+02
380	.1684E+01	.1545E+01	.2613E+02	.3724E+01	.1019E+01	.2791E+01	.2017E+01	.1459E+01	.2232E+02
440	.1759E+01	.1444E+01	.2715E+02	.3544E+01	.9342E+00	.3182E+01	.2051E+01	.1360E+01	.2323E+02
520	.1854E+01	.1303E+01	.2844E+02	.3356E+01	.8230E+00	.3627E+01	.2099E+01	.1224E+01	.2438E+02
600	.1943E+01	.1159E+01	.2965E+02	.3212E+01	.7160E+00	.4006E+01	.2150E+01	.1087E+01	.2546E+02

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--- MAT SN115   (501150) ENDF ID (9517)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4278E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5000E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5428E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2118E+02	.1001E+01	.6277E+00	.2983E-01	.1008E+01	.7295E+00	.1697E+01
20	.1128E+01	.1920E+01	.2187E+02	.1001E+01	.6139E+00	.3092E-01	.1011E+01	.7168E+00	.1752E+01
80	.1238E+01	.1902E+01	.2377E+02	.1001E+01	.5745E+00	.3398E-01	.1020E+01	.6791E+00	.1905E+01
140	.1339E+01	.1862E+01	.2550E+02	.1001E+01	.5367E+00	.3675E-01	.1028E+01	.6411E+00	.2044E+01
200	.1433E+01	.1802E+01	.2710E+02	.1001E+01	.4997E+00	.3934E-01	.1035E+01	.6024E+00	.2172E+01
260	.1521E+01	.1727E+01	.2858E+02	.1001E+01	.4634E+00	.4177E-01	.1042E+01	.5630E+00	.2291E+01
320	.1605E+01	.1640E+01	.2998E+02	.1001E+01	.4278E+00	.4408E-01	.1049E+01	.5234E+00	.2403E+01
380	.1684E+01	.1545E+01	.3129E+02	.1001E+01	.3931E+00	.4623E-01	.1055E+01	.4839E+00	.2509E+01
440	.1759E+01	.1443E+01	.3255E+02	.1001E+01	.3595E+00	.4834E-01	.1061E+01	.4450E+00	.2610E+01
520	.1854E+01	.1303E+01	.3413E+02	.1001E+01	.3165E+00	.5108E-01	.1068E+01	.3942E+00	.2737E+01
600	.1943E+01	.1159E+01	.3562E+02	.1000E+01	.2756E+00	.5386E-01	.1075E+01	.3453E+00	.2857E+01

--- MAT SN116   (501160) ENDF ID (9518)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3979E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1204E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4099E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2567E+02	.1002E+01	.6302E+00	.1051E+03	.1086E+01	.1882E+01	.2801E+02
20	.1128E+01	.1919E+01	.2652E+02	.1002E+01	.6165E+00	.1089E+03	.1124E+01	.1881E+01	.2894E+02
80	.1238E+01	.1901E+01	.2888E+02	.1002E+01	.5772E+00	.1195E+03	.1231E+01	.1863E+01	.3154E+02
140	.1339E+01	.1861E+01	.3102E+02	.1002E+01	.5394E+00	.1293E+03	.1329E+01	.1822E+01	.3391E+02
200	.1433E+01	.1802E+01	.3301E+02	.1002E+01	.5025E+00	.1383E+03	.1421E+01	.1764E+01	.3610E+02
260	.1521E+01	.1727E+01	.3486E+02	.1002E+01	.4661E+00	.1468E+03	.1506E+01	.1690E+01	.3815E+02
320	.1605E+01	.1640E+01	.3659E+02	.1002E+01	.4305E+00	.1549E+03	.1587E+01	.1604E+01	.4007E+02
380	.1684E+01	.1545E+01	.3824E+02	.1002E+01	.3957E+00	.1625E+03	.1664E+01	.1511E+01	.4189E+02
440	.1759E+01	.1443E+01	.3980E+02	.1002E+01	.3620E+00	.1698E+03	.1737E+01	.1412E+01	.4362E+02
520	.1854E+01	.1303E+01	.4178E+02	.1002E+01	.3188E+00	.1791E+03	.1829E+01	.1274E+01	.4581E+02
600	.1943E+01	.1159E+01	.4365E+02	.1002E+01	.2777E+00	.1879E+03	.1915E+01	.1133E+01	.4788E+02

--- MAT SN117   (501170) ENDF ID (9519)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4240E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2598E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6838E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2083E+02	.1001E+01	.6294E+00	.7285E+01	.1056E+01	.1430E+01	.1568E+02
20	.1128E+01	.1919E+01	.2150E+02	.1001E+01	.6157E+00	.7547E+01	.1080E+01	.1424E+01	.1620E+02
80	.1238E+01	.1901E+01	.2337E+02	.1001E+01	.5763E+00	.8284E+01	.1148E+01	.1398E+01	.1764E+02
140	.1339E+01	.1861E+01	.2507E+02	.1001E+01	.5386E+00	.8961E+01	.1211E+01	.1359E+01	.1895E+02
200	.1433E+01	.1802E+01	.2663E+02	.1001E+01	.5017E+00	.9590E+01	.1269E+01	.1308E+01	.2016E+02
260	.1521E+01	.1727E+01	.2809E+02	.1002E+01	.4654E+00	.1018E+02	.1324E+01	.1248E+01	.2128E+02
320	.1605E+01	.1640E+01	.2946E+02	.1002E+01	.4298E+00	.1074E+02	.1376E+01	.1180E+01	.2235E+02
380	.1684E+01	.1545E+01	.3075E+02	.1002E+01	.3951E+00	.1127E+02	.1425E+01	.1108E+01	.2335E+02
440	.1759E+01	.1443E+01	.3197E+02	.1002E+01	.3615E+00	.1178E+02	.1471E+01	.1032E+01	.2430E+02
520	.1854E+01	.1303E+01	.3352E+02	.1002E+01	.3184E+00	.1243E+02	.1530E+01	.9287E+00	.2551E+02
600	.1943E+01	.1159E+01	.3499E+02	.1001E+01	.2774E+00	.1305E+02	.1585E+01	.8240E+00	.2665E+02

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--- MAT SN118   (501180) ENDF ID (9521)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4099E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8245E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4181E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2354E+02	.1000E+01	.6287E+00	.8014E+02	.1087E+01	.1894E+01	.2466E+02
20	.1128E+01	.1919E+01	.2431E+02	.1001E+01	.6150E+00	.8302E+02	.1126E+01	.1894E+01	.2546E+02
80	.1238E+01	.1902E+01	.2645E+02	.1001E+01	.5757E+00	.9113E+02	.1234E+01	.1875E+01	.2772E+02
140	.1339E+01	.1862E+01	.2840E+02	.1001E+01	.5380E+00	.9857E+02	.1333E+01	.1835E+01	.2978E+02
200	.1433E+01	.1802E+01	.3020E+02	.1001E+01	.5011E+00	.1055E+03	.1425E+01	.1777E+01	.3168E+02
260	.1521E+01	.1727E+01	.3187E+02	.1001E+01	.4647E+00	.1120E+03	.1511E+01	.1702E+01	.3345E+02
320	.1605E+01	.1640E+01	.3345E+02	.1001E+01	.4291E+00	.1181E+03	.1593E+01	.1616E+01	.3512E+02
380	.1684E+01	.1545E+01	.3494E+02	.1001E+01	.3944E+00	.1239E+03	.1670E+01	.1522E+01	.3669E+02
440	.1759E+01	.1443E+01	.3635E+02	.1001E+01	.3608E+00	.1295E+03	.1744E+01	.1422E+01	.3819E+02
520	.1854E+01	.1303E+01	.3814E+02	.1001E+01	.3177E+00	.1366E+03	.1837E+01	.1283E+01	.4008E+02
600	.1943E+01	.1159E+01	.3983E+02	.1000E+01	.2767E+00	.1433E+03	.1924E+01	.1142E+01	.4187E+02

--- MAT SN119   (501190) ENDF ID (9522)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4405E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2300E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6705E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2060E+02	.1001E+01	.6277E+00	.1349E+01	.1059E+01	.1477E+01	.1400E+02
20	.1128E+01	.1920E+01	.2126E+02	.1001E+01	.6140E+00	.1397E+01	.1085E+01	.1472E+01	.1445E+02
80	.1238E+01	.1902E+01	.2311E+02	.1001E+01	.5745E+00	.1534E+01	.1157E+01	.1446E+01	.1571E+02
140	.1339E+01	.1862E+01	.2478E+02	.1001E+01	.5367E+00	.1659E+01	.1223E+01	.1407E+01	.1685E+02
200	.1433E+01	.1802E+01	.2633E+02	.1001E+01	.4998E+00	.1775E+01	.1285E+01	.1355E+01	.1791E+02
260	.1521E+01	.1727E+01	.2777E+02	.1001E+01	.4634E+00	.1884E+01	.1343E+01	.1294E+01	.1889E+02
320	.1605E+01	.1640E+01	.2911E+02	.1001E+01	.4278E+00	.1988E+01	.1398E+01	.1224E+01	.1981E+02
380	.1684E+01	.1545E+01	.3039E+02	.1001E+01	.3932E+00	.2086E+01	.1450E+01	.1150E+01	.2068E+02
440	.1759E+01	.1443E+01	.3160E+02	.1001E+01	.3595E+00	.2179E+01	.1499E+01	.1072E+01	.2151E+02
520	.1854E+01	.1303E+01	.3313E+02	.1001E+01	.3165E+00	.2299E+01	.1561E+01	.9645E+00	.2255E+02
600	.1943E+01	.1159E+01	.3457E+02	.1000E+01	.2757E+00	.2412E+01	.1619E+01	.8561E+00	.2354E+02

--- MAT SN120   (501200) ENDF ID (9524)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4387E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1410E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4528E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1866E+02	.1001E+01	.6277E+00	.8904E+01	.1086E+01	.1880E+01	.1835E+02
20	.1128E+01	.1920E+01	.1925E+02	.1001E+01	.6140E+00	.9224E+01	.1124E+01	.1879E+01	.1893E+02
80	.1238E+01	.1902E+01	.2089E+02	.1001E+01	.5745E+00	.1012E+02	.1231E+01	.1860E+01	.2056E+02
140	.1339E+01	.1862E+01	.2239E+02	.1001E+01	.5367E+00	.1095E+02	.1329E+01	.1820E+01	.2203E+02
200	.1433E+01	.1802E+01	.2377E+02	.1001E+01	.4997E+00	.1172E+02	.1420E+01	.1762E+01	.2339E+02
260	.1521E+01	.1727E+01	.2505E+02	.1001E+01	.4634E+00	.1244E+02	.1505E+01	.1688E+01	.2466E+02
320	.1605E+01	.1640E+01	.2625E+02	.1001E+01	.4278E+00	.1312E+02	.1586E+01	.1603E+01	.2584E+02
380	.1684E+01	.1545E-01	.2738E+02	.1001E+01	.3931E+00	.1377E+02	.1663E+01	.1509E+01	.2696E+02
440	.1759E+01	.1444E+01	.2846E+02	.1001E+01	.3595E+00	.1439E+02	.1735E+01	.1410E+01	.2802E+02
520	.1854E+01	.1303E+01	.2981E+02	.1001E+01	.3165E+00	.1517E+02	.1827E+01	.1272E+01	.2936E+02
600	.1943E+01	.1159E+01	.3109E+02	.1000E+01	.2757E+00	.1592E+02	.1913E+01	.1132E+01	.3062E+02

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--- MAT SN122   (501220) ENDF ID (9527)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4182E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1810E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4363E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2055E+02	.1001E+01	.6277E+00	.3968E+01	.1085E+01	.1866E+01	.1986E+02
20	.1128E+01	.1920E+01	.2121E+02	.1001E+01	.6139E+00	.4111E+01	.1123E+01	.1865E+01	.2050E+02
80	.1238E+01	.1902E+01	.2305E+02	.1001E+01	.5745E+00	.4513E+01	.1228E+01	.1847E+01	.2228E+02
140	.1339E+01	.1862E+01	.2472E+02	.1001E+01	.5367E+00	.4881E+01	.1325E+01	.1807E+01	.2390E+02
200	.1433E+01	.1802E+01	.2626E+02	.1001E+01	.4997E+00	.5224E+01	.1415E+01	.1748E+01	.2539E+02
260	.1521E+01	.1727E+01	.2770E+02	.1001E+01	.4634E+00	.5545E+01	.1500E+01	.1675E+01	.2678E+02
320	.1605E+01	.1640E+01	.2905E+02	.1001E+01	.4278E+00	.5849E+01	.1580E+01	.1590E+01	.2808E+02
380	.1684E+01	.1545E+01	.3032E+02	.1001E+01	.3931E+00	.6137E+01	.1655E+01	.1497E+01	.2931E+02
440	.1759E+01	.1444E+01	.3152E+02	.1001E+01	.3595E+00	.6413E+01	.1728E+01	.1399E+01	.3048E+02
520	.1854E+01	.1303E+01	.3305E+02	.1001E+01	.3165E+00	.6764E+01	.1818E+01	.1262E+01	.3196E+02
600	.1943E+01	.1159E+01	.3449E+02	.1000E+01	.2757E+00	.7097E+01	.1904E+01	.1122E+01	.3335E+02

--- MAT SN124   (501240) ENDF ID (9530)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4442E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1299E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4572E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1901E+02	.1001E+01	.6313E+00	.5897E+02	.1086E+01	.1883E+01	.2015E+02
20	.1128E+01	.1920E+01	.1961E+02	.1001E+01	.6177E+00	*.6109E+02	.1124E+01	.1883E+01	.2079E+02
80	.1238E+01	.1902E+01	.2130E+02	.1002E+01	.5784E+00	.6705E+02	.1231E+01	.1864E+01	.2260E+02
140	.1339E+01	.1862E+01	.2283E+02	.1002E+01	.5407E+00	.7253E+02	.1330E+01	.1824E+01	.2424E+02
200	.1433E+01	.1802E+01	.2423E+02	.1002E+01	.5038E+00	.7762E+02	.1421E+01	.1765E+01	.2575E+02
260	.1521E+01	.1727E-01	.2554E+02	.1002E+01	.4674E+00	.8239E+02	.1507E+01	.1691E+01	.2716E+02
320	.1605E+01	.1640E+01	.2677E+02	.1002E+01	.4317E+00	.8691E+02	.1588E+01	.1606E+01	.2848E+02
380	.1684E+01	.1545E+01	.2793E+02	.1003E+01	.3969E+00	.9120E+02	.1664E+01	.1512E+01	.2973E+02
440	.1759E+01	.1444E+01	.2903E+02	.1003E+01	.3631E+00	.9530E+02	.1737E+01	.1413E+01	.3091E+02
520	.1854E+01	.1303E+01	.3042E+02	.1003E+01	.3199E+00	.1005E+03	.1830E+01	.1275E+01	.3241E+02
600	.1943E+01	.1159E+01	.3173E+02	.1003E+01	.2787E+00	.1054E+03	.1916E+01	.1134E+01	.3382E+02

--- MAT SN125   (501250) ENDF ID (9531)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4571E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5500E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5121E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2097E+02	.1001E+01	.6277E+00	.2885E+02	.1079E+01	.1781E+01	.2181E+02
20	.1128E+01	.1920E+01	.2164E+02	.1001E+01	.6139E+00	.2989E+02	.1114E+01	.1779E+01	.2253E+02
80	.1238E+01	.1902E+01	.2353E+02	.1001E+01	.5745E+00	.3281E+02	.1213E+01	.1759E+01	.2452E+02
140	.1339E+01	.1862E+01	.2524E+02	.1001E+01	.5367E+00	.3549E+02	.1303E+01	.1719E+01	.2634E+02
200	.1433E+01	.1802E+01	.2681E+02	.1001E+01	.4997E+00	.3798E+02	.1387E+01	.1662E+01	.2801E+02
260	.1521E+01	.1727E+01	.2828E+02	.1001E+01	.4634E+00	.4031E+02	.1466E+01	.1591E+01	.2957E+02
320	.1605E+01	.1640E+01	.2966E+02	.1001E+01	.4278E+00	.4252E+02	.1540E+01	.1510E+01	.3104E+02
380	.1684E+01	.1545E+01	.3096E+02	.1001E+01	.3931E+00	.4462E+02	.1610E+01	.1421E+01	.3243E+02
440	.1759E+01	.1444E+01	.3220E+02	.1001E+01	.3595E+00	.4662E+02	.1678E+01	.1327E+01	.3375E+02
520	.1854E+01	.1303E+01	.3376E+02	.1001E+01	.3165E+00	.4917E+02	.1762E+01	.1197E+01	.3541E+02
600	.1943E+01	.1159E+01	.3523E+02	.1000E+01	.2756E+00	.5159E+02	.1842E+01	.1064E+01	.3699E+02

--- MAT SN126 (501260) ENDF ID (9533)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4595E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .3000E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4895E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1782E+02	.1001E+01	.6277E+00	.1358E+00	.1084E+01	.1841E+01	.1674E+02
20	.1128E+01	.1920E+01	.1838E+02	.1001E+01	.6139E+00	.1407E+00	.1120E+01	.1840E+01	.1726E+02
80	.1238E+01	.1902E+01	.1995E+02	.1001E+01	.5745E+00	.1545E+00	.1224E+01	.1820E+01	.1873E+02
140	.1339E+01	.1862E+01	.2136E+02	.1001E+01	.5367E+00	.1672E+00	.1319E+01	.1780E+01	.2006E+02
200	.1433E+01	.1802E+01	.2267E+02	.1001E+01	.4997E+00	.1789E+00	.1407E+01	.1722E+01	.2129E+02
260	.1521E+01	.1727E+01	.2388E+02	.1001E+01	.4634E+00	.1899E+00	.1490E+01	.1650E+01	.2243E+02
320	.1605E+01	.1640E+01	.2502E+02	.1001E+01	.4278E+00	.2003E+00	.1568E+01	.1566E+01	.2350E+02
380	.1684E+01	.1545E+01	.2609E+02	.1001E+01	.3931E+00	.2102E+00	.1642E+01	.1474E+01	.2450E+02
440	.1759E+01	.1444E+01	.2711E+02	.1001E+01	.3595E+00	.2197E+00	.1713E+01	.1377E+01	.2546E+02
520	.1854E+01	.1303E+01	.2839E+02	.1001E+01	.3165E+00	.2318E+00	.1802E+01	.1242E+01	.2666E+02
600	.1943E+01	.1159E+01	.2960E+02	.1000E+01	.2756E+00	.2435E+00	.1885E+01	.1105E+01	.2780E+02

--- MAT SR84 (380840) ENDF ID (9179)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3880E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8145E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4695E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3664E+02	.3549E+01	.9866E+00	.1093E+02	.1516E+01	.1758E+01	.3216E+02
20	.1128E+01	.1919E+01	.3788E+02	.3385E+01	.9724E+00	.1161E+02	.1520E+01	.1755E+01	.3332E+02
80	.1238E+01	.1901E+01	.4135E+02	.2995E+01	.9267E+00	.1343E+02	.1543E+01	.1732E+01	.3650E+02
140	.1339E+01	.1861E+01	.4451E+02	.2716E+01	.8770E+00	.1500E+02	.1578E+01	.1691E+01	.3939E+02
200	.1433E+01	.1802E+01	.4744E+02	.2510E+01	.8240E+00	.1639E+02	.1620E+01	.1632E+01	.4205E+02
260	.1521E+01	.1727E+01	.5018E+02	.2354E+01	.7689E+00	.1765E+02	.1666E+01	.1561E+01	.4453E+02
320	.1605E+01	.1640E+01	.5275E+02	.2234E+01	.7128E+00	.1880E+02	.1714E+01	.1479E+01	.4686E+02
380	.1684E+01	.1545E+01	.5520E+02	.2140E+01	.6568E+00	.1987E+02	.1763E+01	.1390E+01	.4907E+02
440	.1759E+01	.1443E+01	.5752E+02	.2065E+01	.6015E+00	.2087E+02	.1812E+01	.1297E+01	.5116E+02
520	.1854E+01	.1303E+01	.6047E+02	.1986E+01	.5298E+00	.2213E+02	.1877E+01	.1169E+01	.5381E+02
600	.1943E+01	.1159E+01	.6325E+02	.1926E+01	.4611E+00	.2330E+02	.1940E+01	.1038E+01	.5632E+02

--- MAT SR86 (380860) ENDF ID (9182)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2187E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2840E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5027E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.6418E+02	.1001E+01	.6278E+00	.1481E+01	.1039E+01	.1190E+01	.2876E+02
20	.1128E+01	.1919E+01	.6641E+02	.1001E+01	.6141E+00	.1534E+01	.1056E+01	.1182E+01	.2976E+02
80	.1238E+01	.1901E+01	.7266E+02	.1001E+01	.5746E+00	.1684E+01	.1104E+01	.1152E+01	.3256E+02
140	.1339E+01	.1861E+01	.7838E+02	.1001E+01	.5368E+00	.1821E+01	.1148E+01	.1113E+01	.3513E+02
200	.1433E+02	.1802E+01	.8369E+02	.1001E+01	.4999E+00	.1949E+01	.1189E+01	.1066E+01	.3751E+02
260	.1521E+01	.1727E+01	.8866E+02	.1001E+01	.4635E+00	.2069E+01	.1228E+01	.1013E+01	.3974E+02
320	.1605E+01	.1640E+01	.9334E+02	.1001E+01	.4279E+00	.2183E+01	.1264E+01	.9551E+00	.4184E+02
380	.1684E+01	.1544E+01	.9779E+02	.1001E+01	.3933E+00	.2290E+01	.1298E+01	.8940E+00	.4383E+02
440	.1759E+01	.1443E+01	.1020E+03	.1001E+01	.3597E+00	.2393E+01	.1331E+01	.8310E+00	.4574E+02
520	.1854E+01	.1302E+01	.1074E+03	.1001E+01	.3166E+00	.2524E+01	.1372E+01	.7455E+00	.4815E+02
600	.1943E+01	.1159E+01	.1125E+03	.1000E+01	.2758E+00	.2648E+01	.1410E+01	.6598E+00	.5044E+02

--- MAT SR87 (380870) ENDF ID (9183)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3217E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1600E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1922E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1913E+01	.2883E+02	.1006E+01	.6988E+00	.7628E+01	.1020E+01	.9020E+00	.1118E+02
20	.1128E+01	.1912E+01	.2978E+02	.1007E+01	.6868E+00	.7901E+01	.1027E+01	.8919E+00	.1156E+02
80	.1238E+01	.1894E+01	.3246E+02	.1010E+01	.6515E+00	.8666E+01	.1048E+01	.8594E+00	.1265E+02
140	.1338E+01	.1853E+01	.3490E+02	.1014E+01	.6164E+00	.9368E+01	.1068E+01	.8233E+00	.1364E+02
200	.1432E+01	.1793E+01	.3716E+02	.1017E+01	.5805E+00	.1002E+02	.1087E+01	.7835E+00	.1456E+02
260	.1520E+01	.1718E+01	.3926E+02	.1021E+01	.5440E+00	.1063E+02	.1105E+01	.7405E+00	.1542E+02
320	.1603E+01	.1631E+01	.4124E+02	.1025E+01	.5070E+00	.1121E+02	.1121E+01	.6952E+00	.1623E+02
380	.1682E+01	.1536E+01	.4311E+02	.1028E+01	.4701E+00	.1176E+02	.1138E+01	.6485E+00	.1700E+02
440	.1757E+01	.1435E+01	.4490E+02	.1032E+01	.4334E+00	.1228E+02	.1153E+01	.6010E+00	.1774E+02
520	.1851E+01	.1295E+01	.4715E+02	.1037E+01	.3854E+00	.1294E+02	.1173E+01	.5376E+00	.1867E+02
600	.1939E+01	.1151E+01	.4929E+02	.1041E+01	.3387E+00	.1357E+02	.1192E+01	.4747E+00	.1955E+02

--- MAT SR88 (380880) ENDF ID (9185)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3616E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5800E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .3622E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1796E+02	.1001E+01	.6278E+00	.1074E+01	.1089E+01	.1918E+01	.1794E+02
20	.1128E+01	.1920E+01	.1853E+02	.1001E+01	.6140E+00	.1112E+01	.1128E+01	.1917E+01	.1850E+02
80	.1238E+01	.1902E+01	.2011E+02	.1001E+01	.5746E+00	.1221E+01	.1238E+01	.1900E+01	.2008E+02
140	.1339E+01	.1862E+01	.2154E+02	.1001E+01	.5368E+00	.1321E+01	.1339E+01	.1859E+01	.2151E+02
200	.1433E+01	.1802E+01	.2286E+02	.1001E+01	.4998E+00	.1413E+01	.1433E+01	.1800E+01	.2282E+02
260	.1521E+01	.1727E+01	.2408E+02	.1001E+01	.4635E+00	.1500E+01	.1521E+01	.1725E+01	.2405E+02
320	.1605E+01	.1640E+01	.2523E+02	.1001E+01	.4278E+00	.1582E+01	.1604E+01	.1638E+01	.2519E+02
380	.1684E+01	.1545E+01	.2631E+02	.1001E+01	.3932E+00	.1661E+01	.1683E+01	.1543E+01	.2627E+02
440	.1759E+01	.1444E+01	.2734E+02	.1001E+01	.3596E+00	.1735E+01	.1758E+01	.1442E+01	.2730E+02
520	.1854E+01	.1303E+01	.2864E+02	.1001E+01	.3165E+00	.1830E+01	.1852E+01	.1301E+01	.2859E+02
600	.1943E+01	.1159E+01	.2986E+02	.1001E+01	.2757E+00	.1920E+01	.1941E+01	.1158E+01	.2981E+02

--- MAT SR89 (380890) ENDF ID (9186)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3644E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4200E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4064E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2633E+02	.1001E+01	.6277E+00	.8251E+00	.1080E+01	.1786E+01	.2370E+02
20	.1128E+01	.1920E+01	.2720E+02	.1001E+01	.6139E+00	.8548E+00	.1115E+01	.1785E+01	.2448E+02
80	.1238E+01	.1902E+01	.2963E+02	.1001E+01	.5745E+00	.9383E+00	.1214E+01	.1764E+01	.2666E+02
140	.1339E+01	.1862E+01	.3184E+02	.1001E+01	.5367E+00	.1015E+01	.1304E+01	.1725E+01	.2865E+02
200	.1433E+01	.1802E+01	.3388E+02	.1001E+01	.4997E+00	.1086E+01	.1389E+01	.1668E+01	.3049E+02
260	.1521E+01	.1727E+01	.3578E+02	.1001E+01	.4634E+00	.1153E+01	.1468E+01	.1597E+01	.3220E+02
320	.1605E+01	.1640E+01	.3757E+02	.1001E+01	.4278E+00	.1216E+01	.1542E+01	.1515E+01	.3381E+02
380	.1684E+01	.1545E+01	.3926E+02	.1001E+01	.3931E+00	.1276E+01	.1613E+01	.1426E+01	.3533E+02
440	.1759E+01	.1444E+01	.4087E+02	.1001E+01	.3595E+00	.1334E+01	.1681E+01	.1331E+01	.3678E+02
520	.1854E+01	.1303E+01	.4290E+02	.1001E+01	.3165E+00	.1407E+01	.1766E+01	.1201E+01	.3861E+02
600	.1943E+01	.1159E+01	.4483E+02	.1000E+01	.2756E+00	.1476E+01	.1845E+01	.1068E+01	.4035E+02

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--- MAT SR90   (380900) ENDF ID (9187)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3671E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9000E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4571E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2255E+02	.1001E+01	.6277E+00	.1150E+00	.1072E+01	.1666E+01	.1814E+02
20	.1128E+01	.1920E+01	.2329E+02	.1001E+01	.6139E+00	.1191E+00	.1103E+01	.1662E+01	.1873E+02
80	.1238E+01	.1902E+01	.2533E+02	.1001E+01	.5745E+00	.1308E+00	.1192E+01	.1640E+01	.2037E+02
140	.1339E+01	.1862E+01	.2719E+02	.1001E+01	.5367E+00	.1415E+00	.1273E+01	.1601E+01	.2186E+02
200	.1433E+01	.1802E+01	.2890E+02	.1001E+01	.4997E+00	.1514E+00	.1348E+01	.1546E+01	.2324E+02
260	.1521E+01	.1727E+01	.3050E+02	.1001E+01	.4634E+00	.1607E+00	.1419E+01	.1478E+01	.2452E+02
320	.1605E+01	.1640E+01	.3200E+02	.1001E+01	.4278E+00	.1695E+00	.1486E+01	.1402E+01	.2573E+02
380	.1684E+01	.1545E+01	.3341E+02	.1001E+01	.3931E+00	.1779E+00	.1549E+01	.1318E+01	.2687E+02
440	.1759E+01	.1444E+01	.3476E+02	.1001E+01	.3595E+00	.1859E+00	.1610E+01	.1230E+01	.2795E+02
520	.1854E+01	.1303E+01	.3646E+02	.1001E+01	.3165E+00	.1962E+00	.1686E+01	.1109E+01	.2932E+02
600	.1943E+01	.1159E+01	.3807E+02	.1000E+01	.2756E+00	.2061E+00	.1757E+01	.9851E+00	.3061E+02

--- MAT S32   (160320) ENDF ID (1316)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1200E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4910E+00 BARNS			REACTION TYPE 107 IS (N,ALPHA) SIGMA ZERO .3000E-02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1085E+01	.1825E+01	.2102E+02	.1003E+01	.7335E+00	.1415E+01	.1089E+01	.1920E+01	.1677E+02
20	.1123E+01	.1822E+01	.2170E+02	.1008E+01	.7196E+00	.1456E+01	.1128E+01	.1920E+01	.1729E+02
80	.1229E+01	.1798E+01	.2360E+02	.1022E+01	.6788E+00	.1570E+01	.1238E+01	.1902E+01	.1875E+02
140	.1325E+01	.1755E+01	.2532E+02	.1033E+01	.6383E+00	.1674E+01	.1339E+01	.1862E+01	.2007E+02
200	.1414E+01	.1695E+01	.2691E+02	.1043E+01	.5976E+00	.1771E+01	.1433E+01	.1802E+01	.2129E+02
260	.1498E+01	.1621E+01	.2840E+02	.1052E+01	.5567E+00	.1862E+01	.1521E+01	.1727E+01	.2241E+02
320	.1576E+01	.1538E+01	.2980E+02	.1060E+01	.5159E+00	.1948E+01	.1605E+01	.1640E+01	.2347E+02
380	.1649E+01	.1446E+01	.3112E+02	.1067E+01	.4757E+00	.2029E+01	.1684E+01	.1545E+01	.2447E+02
440	.1719E+01	.1350E+01	.3237E+02	.1074E+01	.4364E+00	.2107E+01	.1759E+01	.1444E+01	.2541E+02
520	.1807E+01	.1218E+01	.3396E+02	.1082E+01	.3855E+00	.2207E+01	.1854E+01	.1303E+01	.2660E+02
600	.1889E+01	.1082E+01	.3546E+02	.1088E+01	.3367E+00	.2302E+01	.1943E+01	.1159E+01	.2772E+02

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1694E+01 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .4940E+00 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1061E+01	.1509E+01	.1533E+02	.1004E+01	.7407E+00	.1508E+01
20	.1089E+01	.1502E+01	.1582E+02	.1009E+01	.7269E+00	.1552E+01
80	.1169E+01	.1474E+01	.1720E+02	.1023E+01	.6863E+00	.1674E+01
140	.1241E+01	.1431E+01	.1846E+02	.1035E+01	.6457E+00	.1786E+01
200	.1307E+01	.1377E+01	.1962E+02	.1046E+01	.6049E+00	.1889E+01
260	.1369E+01	.1313E+01	.2070E+02	.1055E+01	.5638E+00	.1986E+01
320	.1426E+01	.1242E+01	.2171E+02	.1063E+01	.5228E+00	.2078E+01
380	.1481E+01	.1165E+01	.2267E+02	.1071E+01	.4822E+00	.2165E+01
440	.1532E+01	.1086E+01	.2359E+02	.1078E+01	.4425E+00	.2249E+01
520	.1597E+01	.9766E+00	.2474E+02	.1086E+01	.3911E+00	.2355E+01
600	.1657E+01	.8663E+00	.2583E+02	.1094E+01	.3417E+00	.2456E+01

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--- MAT TA181   (731810) ENDF ID (1285)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6152E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2114E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2729E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1087E+01	.1889E+01	.4471E+02	.1003E+01	.6713E+00	.3764E+02	.1022E+01	.9458E+00	.3923E+02
20	.1126E+01	.1888E+01	.4624E+02	.1004E+01	.6586E+00	.3899E+02	.1032E+01	.9356E+00	.4062E+02
80	.1236E+01	.1867E+01	.5052E+02	.1006E+01	.6217E+00	.4279E+02	.1058E+01	.9024E+00	.4454E+02
140	.1336E+01	.1825E+01	.5444E+02	.1008E+01	.5855E+00	.4628E+02	.1082E+01	.8649E+00	.4812E+02
200	.1428E+01	.1764E+01	.5806E+02	.1011E+01	.5493E+00	.4953E+02	.1105E+01	.8232E+00	.5145E+02
260	.1515E+01	.1689E+01	.6145E+02	.1013E+01	.5128E+00	.5257E+02	.1126E+01	.7779E+00	.5457E+02
320	.1597E+01	.1602E+01	.6465E+02	.1015E+01	.4763E+00	.5545E+02	.1146E+01	.7301E+00	.5752E+02
380	.1675E+01	.1507E+01	.6768E+02	.1017E+01	.4402E+00	.5818E+02	.1166E+01	.6807E+00	.6032E+02
440	.1749E+01	.1407E+01	.7057E+02	.1020E+01	.4047E+00	.6079E+02	.1184E+01	.6306E+00	.6300E+02
520	.1841E+01	.1268E+01	.7423E+02	.1022E+01	.3586E+00	.6411E+02	.1207E+01	.5637E+00	.6639E+02
600	.1928E+01	.1127E+01	.7770E+02	.1025E+01	.3142E+00	.6726E+02	.1229E+01	.4974E+00	.6961E+02

--- MAT TA182   (731820) ENDF ID (1127)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3101E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .8251E+04 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .8282E+04 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1561E+01	.6151E+01	.1607E+02	.1516E+01	.2886E+01	.1746E+01	.1516E+01	.2898E+01	.1800E+01
20	.1723E+01	.5990E+01	.1608E+02	.1637E+01	.2670E+01	.1355E+01	.1637E+01	.2683E+01	.1410E+01
80	.2266E+01	.5245E+01	.1566E+02	.2022E+01	.1941E+01	.5803E-01	.2023E+01	.1954E+01	.1164E+00
140	.2852E+01	.4403E+01	.1499E+02	.2410E+01	.1295E+01	-.1145E+01	.2412E+01	.1307E+01	-.1085E+01
200	.3436E+01	.3688E+01	.1441E+02	.2770E+01	.8401E+00	-.2091E+01	.2772E+01	.8507E+00	-.2030E+01
260	.3989E+01	.3138E+01	.1402E+02	.3084E+01	.5504E+00	-.2791E+01	.3087E+01	.5601E+00	-.2728E+01
320	.4496E+01	.2719E+01	.1380E+02	.3348E+01	.3708E+00	-.3301E+01	.3352E+01	.3796E+00	-.3237E+01
380	.4948E+01	.2388E+01	.1371E+02	.3561E+01	.2582E+00	-.3673E+01	.3566E+01	.2662E+00	-.3608E+01
440	.5344E+01	.2116E+01	.1372E+02	.3727E+01	.1856E+00	-.3943E+01	.3733E+01	.1929E+00	-.3877E+01
520	.5790E+01	.1812E+01	.1385E+02	.3885E+01	.1248E+00	-.4187E+01	.3893E+01	.1311E+00	-.4120E+01
600	.6152E+01	.1551E+01	.1409E+02	.3984E+01	.8727E-01	-.4333E+01	.3992E+01	.9275E-01	-.4264E+01

--- MAT TB159   (651590) ENDF ID (9857)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4199E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2550E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2970E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1908E+01	.9135E+02	.1002E+01	.6466E+00	.1917E+02	.1015E+01	.8249E+00	.2937E+02
20	.1127E+01	.1907E+01	.9455E+02	.1003E+01	.6333E+00	.1985E+02	.1029E+01	.8134E+00	.3042E+02
80	.1237E+01	.1888E+01	.1036E+03	.1004E+01	.5950E+00	.2179E+02	.1037E+01	.7778E+00	.3335E+02
140	.1338E+01	.1847E+01	.1118E+03	.1005E+01	.5578E+00	.2357E+02	.1052E+01	.7401E+00	.3604E+02
200	.1431E+01	.1787E+01	.1194E+03	.1006E+01	.5211E+00	.2522E+02	.1066E+01	.7002E+00	.3854E+02
260	.1519E+01	.1712E+01	.1266E+03	.1007E+01	.4847E+00	.2677E+02	.1079E+01	.6583E+00	.4089E+02
320	.1602E+01	.1625E+01	.1334E+03	.1007E+01	.4488E+00	.2824E+02	.1092E+01	.6151E+00	.4310E+02
380	.1680E+01	.1530E+01	.1398E+03	.1008E+01	.4135E+00	.2963E+02	.1103E+01	.5713E+00	.4521E+02
440	.1755E+01	.1429E+01	.1459E+03	.1009E+01	.3790E+00	.3096E+02	.1115E+01	.5275E+00	.4721E+02
520	.1849E+01	.1289E+01	.1537E+03	.1010E+01	.3347E+00	.3265E+02	.1129E+01	.4696E+00	.4976E+02
600	.1937E+01	.1147E+01	.1611E+03	.1011E+01	.2923E+00	.3425E+02	.1142E+01	.4130E+00	.5219E+02

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--- MAT TB160   (651600) ENDF ID (9858)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5390E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5250E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5304E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.4000E+02	.1001E+01	.6254E+00	.1861E+01	.1001E+01	.6386E+00	.2249E+01
20	.1128E+01	.1920E+01	.4136E+02	.1001E+01	.6117E+00	.1928E+01	.1002E+01	.6250E+00	.2329E+01
80	.1238E+01	.1902E+01	.4517E+02	.1000E+01	.5723E+00	.2117E+01	.1003E+01	.5858E+00	.2555E+01
140	.1339E+01	.1862E+01	.4865E+02	.1000E+01	.5345E+00	.2292E+01	.1004E+01	.5480E+00	.2763E+01
200	.1433E+01	.1802E+01	.5187E+02	.1000E+01	.4976E+00	.2455E+01	.1004E+01	.5109E+00	.2957E+01
260	.1521E+01	.1727E+01	.5488E+02	.9998E+00	.4614E+00	.2609E+01	.1005E+01	.4743E+00	.3140E+01
320	.1605E+01	.1640E+01	.5771E+02	.9997E+00	.4259E+00	.2757E+01	.1006E+01	.4382E+00	.3315E+01
380	.1684E+01	.1545E+01	.6040E+02	.9995E+00	.3914E+00	.2900E+01	.1006E+01	.4031E+00	.3484E+01
440	.1759E+01	.1444E+01	.6296E+02	.9993E+00	.3579E+00	.3039E+01	.1007E+01	.3689E+00	.3648E+01
520	.1854E+01	.1303E+01	.6620E+02	.9989E+00	.3150E+00	.3220E+01	.1008E+01	.3251E+00	.3860E+01
600	.1943E+01	.1159E+01	.6927E+02	.9983E+00	.2743E+00	.3397E+01	.1008E+01	.2833E+00	.4066E+01

--- MAT TC99   (430990) ENDF ID (1308)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6817E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1949E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2631E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1309E+01	.2165E+02	.1004E+01	.6755E+00	.1913E+02	.1026E+01	.9951E+00	.1979E+02
20	.1127E+01	.1908E+01	.2235E+02	.1005E+01	.6629E+00	.1982E+02	.1037E+01	.9655E+00	.2048E+02
80	.1237E+01	.1889E+01	.2431E+02	.1008E+01	.6260E+00	.2175E+02	.1067E+01	.9533E+00	.2241E+02
140	.1338E+01	.1848E+01	.2608E+02	.1010E+01	.5898E+00	.2352E+02	.1095E+01	.9159E+00	.2419E+02
200	.1432E+01	.1789E+01	.2772E+02	.1013E+01	.5535E+00	.2517E+02	.1121E+01	.8735E+00	.2583E+02
260	.1519E+01	.1713E+01	.2924E+02	.1015E+01	.5168E+00	.2672E+02	.1146E+01	.8269E+00	.2737E+02
320	.1602E+01	.1626E+01	.3067E+02	.1018E+01	.4802E+00	.2818E+02	.1169E+01	.7772E+00	.2882E+02
380	.1681E+01	.1531E+01	.3202E+02	.1020E+01	.4439E+00	.2956E+02	.1191E+01	.7256E+00	.3020E+02
440	.1755E+01	.1430E+01	.3331E+02	.1022E+01	.4082E+00	.3089E+02	.1212E+01	.6730E+00	.3151E+02
520	.1849E+01	.1290E+01	.3493E+02	.1026E+01	.3617E+00	.3257E+02	.1239E+01	.6024E+00	.3318E+02
600	.1937E+01	.1147E+01	.3646E+02	.1028E+01	.3169E+00	.3417E+02	.1264E+01	.5322E+00	.3476E+02

--- MAT TE120   (521200) ENDF ID (9576)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4796E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2299E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .7095E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2642E+02	.7141E+01	.1486E+01	.6640E+01	.3050E+01	.1779E+01	.2001E+02
20	.1128E+01	.1920E+01	.2730E+02	.6745E+01	.1472E+01	.7566E+01	.2949E+01	.1774E+01	.2090E+02
80	.1238E+01	.1902E+01	.2973E+02	.5806E+01	.1417E+01	.9956E+01	.2718E+01	.1745E+01	.2332E+02
140	.1339E+01	.1862E+01	.3195E+02	.5132E+01	.1350E+01	.1191E+02	.2568E+01	.1696E+01	.2545E+02
200	.1433E+01	.1802E+01	.3399E+02	.4635E+01	.1275E+01	.1357E+02	.2471E+01	.1631E+01	.2737E+02
260	.1521E+01	.1727E+01	.3590E+02	.4259E+01	.1194E+01	.1500E+02	.2409E+01	.1554E+01	.2913E+02
320	.1605E+01	.1640E+01	.3770E+02	.3969E+01	.1109E+01	.1627E+02	.2371E+01	.1468E+01	.3076E+02
380	.1684E+01	.1545E+01	.3940E+02	.3741E+01	.1023E+01	.1742E+02	.2351E+01	.1376E+01	.3228E+02
440	.1759E+01	.1444E+01	.4101E+02	.3560E+01	.9379E+00	.1847E+02	.2343E+01	.1280E+01	.3371E+02
520	.1854E+01	.1303E+01	.4306E+02	.3371E+01	.8263E+00	.1975E+02	.2346E+01	.1148E+01	.3550E+02
600	.1943E+01	.1159E+01	.4499E+02	.3226E+01	.7188E+00	.2093E+02	.2359E+01	.1016E+01	.3719E+02

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--- MAT TE122   (521220) ENDF ID (9579)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2951E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2801E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5751E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.4769E+02	.1001E+01	.6315E+00	.2823E+02	.1046E+01	.1292E+01	.3821E+02
20	.1128E+01	.1918E+01	.4933E+02	.1002E+01	.6178E+00	.2924E+02	.1066E+01	.1285E+01	.3955E+02
80	.1238E+01	.1900E+01	.5392E+02	.1002E+01	.5786E+00	.3210E+02	.1123E+01	.1256E+01	.4329E+02
140	.1339E+01	.1860E+01	.5811E+02	.1002E+01	.5408E+00	.3472E+02	.1175E+01	.1217E+01	.4672E+02
200	.1433E+01	.1800E+01	.6199E+02	.1002E+01	.5039E+00	.3715E+02	.1223E+01	.1169E+01	.4990E+02
260	.1521E+01	.1725E+01	.6562E+02	.1002E+01	.4675E+00	.3944E+02	.1269E+01	.1113E+01	.5287E+02
320	.1604E+01	.1638E+01	.6905E+02	.1003E+01	.4318E+00	.4160E+02	.1311E+01	.1051E+01	.5568E+02
380	.1683E+01	.1543E+01	.7229E+02	.1003E+01	.3970E+00	.4365E+02	.1352E+01	.9848E+00	.5835E+02
440	.1758E+01	.1442E+01	.7539E+02	.1003E+01	.3632E+00	.4561E+02	.1390E+01	.9164E+00	.6089E+02
520	.1853E+01	.1301E+01	.7931E+02	.1003E+01	.3199E+00	.4810E+02	.1439E+01	.8233E+00	.6411E+02
600	.1942E+01	.1157E+01	.8302E+02	.1003E+01	.2788E+00	.5047E+02	.1485E+01	.7295E+00	.6717E+02

--- MAT TE123   (521230) ENDF ID (9580)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1000E-03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4102E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4102E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1092E+01	.1261E+04	.7236E+07	.1010E+01	.7806E+00	.1435E+02	.1010E+01	.7809E+00	.1612E+02
20	.1137E+01	.1328E+04	.7497E+07	.1012E+01	.7708E+00	.1487E+02	.1012E+01	.7712E+00	.1669E+02
80	.1335E+01	.1538E+04	.8229E+07	.1019E+01	.7413E+00	.1631E+02	.1019E+01	.7416E+00	.1831E+02
140	.1690E+01	.1752E+04	.8902E+07	.1026E+01	.7100E+00	.1763E+02	.1026E+01	.7104E+00	.1980E+02
200	.3476E+01	.1952E+04	.9527E+07	.1033E+01	.6763E+00	.1886E+02	.1033E+01	.6768E+00	.2118E+02
260	.7211E+01	.2127E+04	.1011E+08	.1041E+01	.6404E+00	.2001E+02	.1041E+01	.6409E+00	.2247E+02
320	.1454E+02	.2274E+04	.1067E+08	.1049E+01	.6025E+00	.2110E+02	.1049E+01	.6031E+00	.2370E+02
380	.2704E+02	.2391E+04	.1120E+08	.1056E+01	.5635E+00	.2214E+02	.1056E+01	.5641E+00	.2487E+02
440	.4612E+02	.2477E+04	.1170E+08	.1064E+01	.5238E+00	.2313E+02	.1064E+01	.5244E+00	.2598E+02
520	.8367E+02	.2539E+04	.1235E+08	.1074E+01	.4704E+00	.2439E+02	.1074E+01	.4710E+00	.2740E+02
600	.1363E+03	.2531E+04	.1296E+08	.1084E+01	.4171E+00	.2560E+02	.1084E+01	.4177E+00	.2876E+02

--- MAT TE124   (521240) ENDF ID (9582)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3816E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6800E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1062E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2437E+02	.1001E+01	.6277E+00	.8256E+00	.1033E+01	.1092E+01	.9290E+01
20	.1128E+01	.1920E+01	.2517E+02	.1001E+01	.6139E+00	.8553E+00	.1047E+01	.1083E+01	.9596E+01
80	.1238E+01	.1902E+01	.2740E+02	.1001E+01	.5745E+00	.9388E+00	.1086E+01	.1052E+01	.1045E+02
140	.1339E+01	.1862E+01	.2943E+02	.1001E+01	.5367E+00	.1015E+01	.1123E+01	.1013E+01	.1123E+02
200	.1433E+01	.1802E+01	.3130E+02	.1001E+01	.4997E+00	.1087E+01	.1156E+01	.9679E+00	.1195E+02
260	.1521E+01	.1727E+01	.3304E+02	.1001E+01	.4634E+00	.1154E+01	.1188E+01	.9176E+00	.1262E+02
320	.1605E+01	.1640E+01	.3468E+02	.1001E+01	.4278E+00	.1217E+01	.1218E+01	.8636E+00	.1324E+02
380	.1684E+01	.1545E+01	.3623E+02	.1001E+01	.3931E+00	.1277E+01	.1246E+01	.8070E+00	.1384E+02
440	.1759E+01	.1443E+01	.3770E+02	.1001E+01	.3595E+00	.1334E+01	.1273E+01	.7491E+00	.1441E+02
520	.1854E+01	.1303E+01	.3956E+02	.1001E+01	.3165E+00	.1407E+01	.1307E+01	.6710E+00	.1512E+02
600	.1943E+01	.1159E+01	.4132E+02	.1000E+01	.2756E+00	.1477E+01	.1339E+01	.5932E+00	.1580E+02

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--- MAT TE125 (521250) ENDF ID (9583)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3961E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1550E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5511E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2563E+02	.1001E+01	.6283E+00	.1609E+02	.1064E+01	.1556E+01	.2294E+02
20	.1128E+01	.1919E+01	.2647E+02	.1001E+01	.6145E+00	.1666E+02	.1092E+01	.1552E+01	.2371E+02
80	.1238E+01	.1901E+01	.2882E+02	.1001E+01	.5751E+00	.1829E+02	.1172E+01	.1528E+01	.2586E+02
140	.1339E+01	.1861E+01	.3096E+02	.1001E+01	.5373E+00	.1979E+02	.1244E+01	.1489E+01	.2782E+02
200	.1433E+01	.1802E+01	.3294E+02	.1001E+01	.5004E+00	.2117E+02	.1312E+01	.1436E+01	.2963E+02
260	.1521E+01	.1727E+01	.3479E+02	.1001E+01	.4640E+00	.2248E+02	.1375E+01	.1372E+01	.3132E+02
320	.1605E+01	.1640E+01	.3652E+02	.1001E+01	.4284E+00	.2371E+02	.1435E+01	.1299E+01	.3292E+02
380	.1684E+01	.1544E+01	.3816E+02	.1001E+01	.3937E+00	.2488E+02	.1492E+01	.1221E+01	.3443E+02
440	.1759E+01	.1443E+01	.3972E+02	.1001E+01	.3601E+00	.2600E+02	.1546E+01	.1139E+01	.3586E+02
520	.1854E+01	.1303E+01	.4169E+02	.1001E+01	.3170E+00	.2742E+02	.1614E+01	.1025E+01	.3768E+02
600	.1943E+01	.1159E+01	.4356E+02	.1001E+01	.2761E+00	.2877E+02	.1678E+01	.9106E+00	.3940E+02

--- MAT TE126 (521260) ENDF ID (9585)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4111E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1035E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5146E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2539E+02	.1001E+01	.6280E+00	.1035E+02	.1071E+01	.1660E+01	.2237E+02
20	.1128E+01	.1919E+01	.2623E+02	.1001E+01	.6143E+00	.1072E+02	.1103E+01	.1657E+01	.2311E+02
80	.1238E+01	.1901E+01	.2856E+02	.1001E+01	.5749E+00	.1177E+02	.1191E+01	.1635E+01	.2518E+02
140	.1339E+01	.1861E+01	.3068E+02	.1001E+01	.5371E+00	.1273E+02	.1271E+01	.1595E+01	.2707E+02
200	.1433E+01	.1802E+01	.3263E+02	.1001E+01	.5001E+00	.1363E+02	.1346E+01	.1540E+01	.2881E+02
260	.1521E+01	.1727E+01	.3446E+02	.1001E+01	.4638E+00	.1446E+02	.1417E+01	.1473E+01	.3044E+02
320	.1605E+01	.1640E+01	.3618E+02	.1001E+01	.4282E+00	.1526E+02	.1483E+01	.1396E+01	.3197E+02
380	.1684E+01	.1545E+01	.3780E+02	.1001E+01	.3935E+00	.1601E+02	.1546E+01	.1313E+01	.3342E+02
440	.1759E+01	.1443E+01	.3934E+02	.1001E+01	.3598E+00	.1673E+02	.1607E+01	.1225E+01	.3480E+02
520	.1854E+01	.1303E+01	.4130E+02	.1001E+01	.3168E+00	.1764E+02	.1682E+01	.1104E+01	.3654E+02
600	.1943E+01	.1159E+01	.4314E+02	.1001E+01	.2759E+00	.1851E+02	.1753E+01	.9813E+00	.3819E+02

--- MAT TE127M (521271) ENDF ID (9587)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4620E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9400E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1402E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2598E+02	.1001E+01	.6277E+00	.4422E+01	.1030E+01	.1054E+01	.1153E+02
20	.1128E+01	.1920E+01	.2684E+02	.1001E+01	.6139E+00	.4581E+01	.1043E+01	.1044E+01	.1191E+02
80	.1238E+01	.1902E+01	.2923E+02	.1001E+01	.5745E+00	.5028E+01	.1079E+01	.1012E+01	.1300E+02
140	.1339E+01	.1862E+01	.3140E+02	.1001E+01	.5367E+00	.5439E+01	.1113E+01	.9733E+00	.1399E+02
200	.1433E+01	.1802E+01	.3341E+02	.1001E+01	.4997E+00	.5820E+01	.1144E+01	.9289E+00	.1491E+02
260	.1521E+01	.1727E+01	.3529E+02	.1001E+01	.4634E+00	.6178E+01	.1173E+01	.8799E+00	.1577E+02
320	.1605E+01	.1640E+01	.3705E+02	.1001E+01	.4278E+00	.6517E+01	.1200E+01	.8273E+00	.1658E+02
380	.1684E+01	.1545E+01	.3871E+02	.1001E+01	.3931E+00	.6839E+01	.1226E+01	.7726E+00	.1734E+02
440	.1759E+01	.1444E+01	.4030E+02	.1001E+01	.3595E+00	.7146E+01	.1251E+01	.7167E+00	.1807E+02
520	.1854E+01	.1303E+01	.4230E+02	.1001E+01	.3165E+00	.7536E+01	.1282E+01	.6415E+00	.1899E+02
600	.1943E+01	.1159E+01	.4420E+02	.1000E+01	.2756E+00	.7908E+01	.1311E+01	.5668E+00	.1987E+02

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--- MAT TE128 (521280) ENDF ID (9588)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4543E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2147E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4758E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1917E+02	.1001E+01	.6277E+00	.1132E+02	.1085E+01	.1862E+01	.1882E+02
20	.1128E+01	.1920E+01	.1978E+02	.1001E+01	.6140E+00	.1173E+02	.1122E+01	.1861E+01	.1942E+02
80	.1238E+01	.1902E+01	.2148E+02	.1001E+01	.5745E+00	.1288E+02	.1228E+01	.1842E+01	.2109E+02
140	.1339E+01	.1862E+01	.2303E+02	.1001E+01	.5367E+00	.1393E+02	.1324E+01	.1802E+01	.2262E+02
200	.1433E+01	.1802E+01	.2445E+02	.1001E+01	.4997E+00	.1490E+02	.1414E+01	.1743E+01	.2402E+02
260	.1521E+01	.1727E+01	.2577E+02	.1001E+01	.4634E+00	.1582E+02	.1498E+01	.1670E+01	.2532E+02
320	.1605E+01	.1640E+01	.2701E+02	.1001E+01	.4278E+00	.1669E+02	.1577E+01	.1586E+01	.2655E+02
380	.1684E+01	.1545E+01	.2818E+02	.1001E+01	.3931E+00	.1751E+02	.1653E+01	.1493E+01	.2770E+02
440	.1759E+01	.1443E+01	.2929E+02	.1001E+01	.3595E+00	.1830E+02	.1725E+01	.1395E+01	.2880E+02
520	.1854E+01	.1303E+01	.3070E+02	.1001E+01	.3165E+00	.1930E+02	.1815E+01	.1258E+01	.3018E+02
600	.1943E+01	.1159E+01	.3202E+02	.1000E+01	.2757E+00	.2025E+02	.1900E+01	.1119E+01	.3149E+02

--- MAT TE129M (521291) ENDF ID (9590)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4668E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1100E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5768E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2454E+02	.1001E+01	.6277E+00	.5482E+01	.1072E+01	.1674E+01	.2090E+02
20	.1128E+01	.1920E+01	.2534E+02	.1001E+01	.6139E+00	.5680E+01	.1104E+01	.1671E+01	.2159E+02
80	.1238E+01	.1902E+01	.2758E+02	.1001E+01	.5745E+00	.6234E+01	.1193E+01	.1649E+01	.2351E+02
140	.1339E+01	.1862E+01	.2962E+02	.1001E+01	.5367E+00	.6743E+01	.1275E+01	.1609E+01	.2526E+02
200	.1433E+01	.1802E+01	.3151E+02	.1001E+01	.4997E+00	.7216E+01	.1351E+01	.1554E+01	.2688E+02
260	.1521E+01	.1727E+01	.3326E+02	.1001E+01	.4634E+00	.7661E+01	.1422E+01	.1486E+01	.2838E+02
320	.1605E+01	.1640E+01	.3492E+02	.1001E+01	.4278E+00	.8080E+01	.1490E+01	.1409E+01	.2980E+02
380	.1684E+01	.1545E+01	.3648E+02	.1001E+01	.3931E+00	.8479E+01	.1554E+01	.1325E+01	.3114E+02
440	.1759E+01	.1444E+01	.3796E+02	.1001E+01	.3595E+00	.8860E+01	.1614E+01	.1237E+01	.3241E+02
520	.1854E+01	.1303E+01	.3984E+02	.1001E+01	.3165E+00	.9344E+01	.1691E+01	.1115E+01	.3402E+02
600	.1943E+01	.1159E+01	.4161E+02	.1000E+01	.2756E+00	.9804E+01	.1763E+01	.9906E+00	.3554E+02

--- MAT TE130 (521300) ENDF ID (9591)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4629E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2900E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4919E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1742E+02	.1001E+01	.6277E+00	.8067E+00	.1084E+01	.1844E+01	.1644E+02
20	.1128E+01	.1920E+01	.1796E+02	.1001E+01	.6139E+00	.8357E+00	.1121E+01	.1843E+01	.1695E+02
80	.1238E+01	.1902E+01	.1949E+02	.1001E+01	.5745E+00	.9173E+00	.1224E+01	.1823E+01	.1839E+02
140	.1319E+01	.1862E+01	.2087E+02	.1001E+01	.5367E+00	.9922E+00	.1319E+01	.1783E+01	.1969E+02
200	.1433E+01	.1802E+01	.2214E+02	.1001E+01	.4997E+00	.1062E+01	.1408E+01	.1725E+01	.2089E+02
260	.1521E+01	.1727E+01	.2332E+02	.1001E+01	.4634E+00	.1127E+01	.1491E+01	.1653E+01	.2201E+02
320	.1605E+01	.1640E+01	.2442E+02	.1001E+01	.4278E+00	.1189E+01	.1569E+01	.1569E+01	.2305E+02
380	.1684E+01	.1545E+01	.2546E+02	.1001E+01	.3931E+00	.1248E+01	.1644E+01	.1477E+01	.2404E+02
440	.1759E+01	.1444E+01	.2645E+02	.1001E+01	.3595E+00	.1304E+01	.1714E+01	.1380E+01	.2497E+02
520	.1854E+01	.1303E+01	.2770E+02	.1001E+01	.3165E+00	.1375E+01	.1804E+01	.1245E+01	.2615E+02
600	.1943E+01	.1159E+01	.2888E+02	.1000E+01	.2756E+00	.1443E+01	.1887E+01	.1107E+01	.2726E+02

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--- MAT TE132   (521320) ENDF ID (9594)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4740E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2000E-02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4742E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1674E+02	.1002E+01	.6284E+00	.7969E+00	.1089E+01	.1919E+01	.1673E+02
20	.1128E+01	.1920E+01	.1726E+02	.1002E+01	.6146E+00	.8256E+00	.1128E+01	.1919E+01	.1725E+02
80	.1238E+01	.1902E+01	.1871E+02	.1002E+01	.5752E+00	.9062E+00	.1238E+01	.1901E+01	.1871E+02
140	.1339E+01	.1862E+01	.2003E+02	.1002E+01	.5373E+00	.9802E+00	.1339E+01	.1861E+01	.2002E+02
200	.1433E+01	.1802E+01	.2124E+02	.1002E+01	.5003E+00	.1049E+01	.1433E+01	.1802E+01	.2123E+02
260	.1521E+01	.1727E+01	.2237E+02	.1002E+01	.4639E+00	.1114E+01	.1521E+01	.1727E+01	.2236E+02
320	.1605E+01	.1640E+01	.2342E+02	.1002E+01	.4283E+00	.1174E+01	.1604E+01	.1640E+01	.2341E+02
380	.1684E+01	.1545E+01	.2442E+02	.1002E+01	.3936E+00	.1232E+01	.1683E+01	.1544E+01	.2441E+02
440	.1759E+01	.1444E+01	.2536E+02	.1002E+01	.3599E+00	.1288E+01	.1759E+01	.1443E+01	.2535E+02
520	.1854E+01	.1303E+01	.2654E+02	.1002E+01	.3168E+00	.1358E+01	.1853E+01	.1302E+01	.2653E+02
600	.1943E+01	.1159E+01	.2766E+02	.1002E+01	.2759E+00	.1425E+01	.1942E+01	.1159E+01	.2765E+02

--- MAT TH230   (902300) ENDF ID (8030)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5907E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2308E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2899E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1085E+01	.1820E+01	.7354E+02	.1006E+01	.7515E+00	.3978E+02	.1022E+01	.9692E+00	.4666E+02
20	.1123E+01	.1816E+01	.7611E+02	.1007E+01	.7422E+00	.4122E+02	.1031E+01	.9610E+00	.4833E+02
80	.1230E+01	.1789E+01	.8331E+02	.1011E+01	.7145E+00	.4527E+02	.1055E+01	.9335E+00	.5302E+02
140	.1328E+01	.1742E+01	.8991E+02	.1015E+01	.6861E+00	.4902E+02	.1078E+01	.9013E+00	.5735E+02
200	.1419E+01	.1678E+01	.9603E+02	.1019E+01	.6557E+00	.5257E+02	.1100E+01	.8641E+00	.6143E+02
260	.1503E+01	.1601E+01	.1018E+03	.1023E+01	.6232E+00	.5599E+02	.1121E+01	.8225E+00	.6532E+02
320	.1582E+01	.1514E+01	.1072E+03	.1028E+01	.5888E+00	.5935E+02	.1141E+01	.7773E+00	.6910E+02
380	.1657E+01	.1420E+01	.1123E+03	.1033E+01	.5531E+00	.6271E+02	.1160E+01	.7298E+00	.7283E+02
440	.1727E+01	.1322E+01	.1173E+03	.1039E+01	.5165E+00	.6614E+02	.1179E+01	.6806E+00	.7655E+02
520	.1815E+01	.1187E+01	.1235E+03	.1046E+01	.4667E+00	.7085E+02	.1203E+01	.6136E+00	.8158E+02
600	.1897E+01	.1052E+01	.1295E+03	.1054E+01	.4165E+00	.7577E+02	.1226E+01	.5459E+00	.8671E+02

--- MAT TH232   (902320) ENDF ID (1390)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1295E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7405E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2035E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1086E+01	.1891E+01	.2073E+02	.9996E+00	.5964E+00	.1210E+02	.1055E+01	.1420E+01	.1759E+02
20	.1125E+01	.1890E+01	.2140E+02	.9989E+00	.5821E+00	.1254E+02	.1079E+01	.1414E+01	.1818E+02
80	.1234E+01	.1871E+01	.2326E+02	.9969E+00	.5413E+00	.1377E+02	.1148E+01	.1387E+01	.1981E+02
140	.1334E+01	.1830E+01	.2495E+02	.9949E+00	.5029E+00	.1490E+02	.1210E+01	.1347E+01	.2129E+02
200	.1426E+01	.1770E+01	.2651E+02	.9931E+00	.4660E+00	.1594E+02	.1269E+01	.1295E+01	.2267E+02
260	.1513E+01	.1695E+01	.2796E+02	.9912E+00	.4302E+00	.1693E+02	.1323E+01	.1235E+01	.2395E+02
320	.1595E+01	.1609E+01	.2933E+02	.9894E+00	.3955E+00	.1786E+02	.1375E+01	.1167E+01	.2515E+02
380	.1672E+01	.1514E+01	.3061E+02	.9876E+00	.3621E+00	.1875E+02	.1423E+01	.1095E+01	.2630E+02
440	.1746E+01	.1414E+01	.3184E+02	.9857E+00	.3300E+00	.1959E+02	.1469E+01	.1020E+01	.2738E+02
520	.1839E+01	.1276E+01	.3338E+02	.9832E+00	.2893E+00	.2067E+02	.1528E+01	.9169E+00	.2876E+02
600	.1926E+01	.1134E+01	.3484E+02	.9805E+00	.2511E+00	.2169E+02	.1582E+01	.8130E+00	.3006E+02

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--- MAT TI-NAT   (220000) ENDF ID (1322)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4417E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6113E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1053E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1916E+01	.3557E+02	.1001E+01	.6234E+00	-.5944E-01	.1035E+01	.1166E+01	.1489E+02
20	.1122E+01	.1916E+01	.3677E+02	.1001E+01	.6096E+00	-.6142E-01	.1052E+01	.1158E+01	.1539E+02
80	.1232E+01	.1899E+01	.4013E+02	.1001E+01	.5699E+00	-.6692E-01	.1098E+01	.1127E+01	.1679E+02
140	.1333E+01	.1859E+01	.4320E+02	.1000E+01	.5320E+00	-.7191E-01	.1140E+01	.1089E+01	.1808E+02
200	.1427E+01	.1800E+01	.4603E+02	.1000E+01	.4950E+00	-.7653E-01	.1179E+01	.1042E+01	.1927E+02
260	.1515E+01	.1725E+01	.4868E+02	.9999E+00	.4587E+00	-.8076E-01	.1216E+01	.9900E+00	.2037E+02
320	.1598E+01	.1639E+01	.5118E+02	.9996E+00	.4232E+00	-.8479E-01	.1251E+01	.9331E+00	.2142E+02
380	.1677E+01	.1543E+01	.5354E+02	.9994E+00	.3887E+00	-.8851E-01	.1284E+01	.8731E+00	.2241E+02
440	.1752E+01	.1442E+01	.5579E+02	.9991E+00	.3553E+00	-.9204E-01	.1315E+01	.8113E+00	.2335E+02
520	.1847E+01	.1302E+01	.5864E+02	.9985E+00	.3126E+00	-.9636E-01	.1355E+01	.7276E+00	.2454E+02
600	.1936E+01	.1158E+01	.6134E+02	.9978E+00	.2721E+00	-.1003E+00	.1391E+01	.6439E+00	.2567E+02

--- MAT U232   (922320) ENDF ID (8232)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .7552E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .7710E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .7259E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1829E+01	.2397E+02	.9830E+00	.4391E+00	.5312E+01	.9793E+00	.4000E+00	.4069E+01
20	.1121E+01	.1826E+01	.2476E+02	.9780E+00	.4235E+00	.5514E+01	.9732E+00	.3841E+00	.4228E+01
80	.1228E+01	.1802E+01	.2695E+02	.9633E+00	.3816E+00	.6085E+01	.9556E+00	.3416E+00	.4680E+01
140	.1325E+01	.1757E+01	.2895E+02	.9493E+00	.3451E+00	.6613E+01	.9387E+00	.3053E+00	.5099E+01
200	.1415E+01	.1696E+01	.3079E+02	.9360E+00	.3124E+00	.7107E+01	.9227E+00	.2734E+00	.5493E+01
260	.1499E+01	.1621E+01	.3251E+02	.9233E+00	.2827E+00	.7572E+01	.9074E+00	.2450E+00	.5864E+01
320	.1578E+01	.1536E+01	.3413E+02	.9112E+00	.2555E+00	.8014E+01	.8928E+00	.2195E+00	.6218E+01
380	.1652E+01	.1443E+01	.3566E+02	.8996E+00	.2304E+00	.8435E+01	.8788E+00	.1963E+00	.6556E+01
440	.1723E+01	.1346E+01	.3712E+02	.8884E+00	.2072E+00	.8838E+01	.8654E+00	.1753E+00	.6880E+01
520	.1811E+01	.1212E+01	.3896E+02	.8742E+00	.1789E+00	.9352E+01	.8483E+00	.1501E+00	.7293E+01
600	.1894E+01	.1076E+01	.4070E+02	.8606E+00	.1533E+00	.9842E+01	.8320E+00	.1276E+00	.7687E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1572E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1497E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9861E+00	.4878E+00	.5635E+01	.9812E+00	.4201E+00	.4709E+01
20	.9827E+00	.4727E+00	.5845E+01	.9757E+00	.4044E+00	.4891E+01
80	.9724E+00	.4313E+00	.6439E+01	.9595E+00	.3622E+00	.5404E+01
140	.9625E+00	.3945E+00	.6987E+01	.9442E+00	.3258E+00	.5879E+01
200	.9529E+00	.3608E+00	.7499E+01	.9296E+00	.2935E+00	.6324E+01
260	.9436E+00	.3296E+00	.7981E+01	.9156E+00	.2644E+00	.6744E+01
320	.9347E+00	.3003E+00	.8439E+01	.9023E+00	.2380E+00	.7143E+01
380	.9262E+00	.2729E+00	.8875E+01	.8895E+00	.2139E+00	.7524E+01
440	.9179E+00	.2472E+00	.9292E+01	.8773E+00	.1917E+00	.7889E+01
520	.9073E+00	.2152E+00	.9823E+01	.8617E+00	.1649E+00	.8354E+01
600	.8971E+00	.1857E+00	.1033E+02	.8468E+00	.1408E+00	.8797E+01

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--- MAT U233 (922330) ENDF ID 1393

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1259E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .5288E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4579E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1075E+01	.1739E+01	.1448E+02	.5976E+00	.6566E+00	.1087E+01	.1022E+01	.7703E+00	.2904E+01
20	.1111E+01	.1735E+01	.1492E+02	.9972E+00	.6453E+00	.1128E+01	.1027E+01	.7514E+01	.2991E+01
80	.1212E+01	.1707E+01	.1617E+02	.9961E+00	.6124E-00	.1244E+01	.1043E+01	.6881E+00	.3223E+01
140	.1304E+01	.1662E+01	.1729E+02	.9955E+00	.5791E+00	.1349E+01	.1061E+01	.6229E+00	.3428E+01
200	.1389E+01	.1600E+01	.1833E+02	.9953E+00	.5444E+00	.1445E+01	.1079E+01	.5613E+00	.3619E+01
260	.1468E+01	.1527E+01	.1929E+02	.9957E+00	.5085E+00	.1533E+01	.1095E+01	.5055E+00	.3805E+01
320	.1542E+01	.1444E+01	.2020E+02	.9965E+00	.4721E+00	.1617E+01	.1110E+01	.4558E+00	.3989E+01
380	.1611E+01	.1355E+01	.2105E+02	.9977E+00	.4358E+00	.1697E+01	.1123E+01	.4113E+00	.4174E+01
440	.1677E+01	.1262E+01	.2186E+02	.9992E+00	.4002E+00	.1774E+01	.1134E+01	.3710E+00	.4359E+01
520	.1759E+01	.1134E+01	.2288E+02	.1001E+01	.3540E+00	.1875E+01	.1146E+01	.3224E+00	.4608E+01
600	.1835E+01	.1006E+01	.2384E+02	.1004E+01	.3095E+00	.1973E+01	.1155E+01	.2784E+00	.4859E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .5872E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .5746E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1001E+01	.6887E+00	.1516E+01	.9996E+00	.6657E+00	.1232E+01
20	.1002E+01	.6770E+00	.1569E+01	.9996E+00	.6538E+00	.1277E+01
80	.1004E+01	.6418E+00	.1718E+01	.9999E+00	.6185E+00	.1402E+01
140	.1007E+01	.6057E+00	.1853E+01	.1001E+01	.5826E+00	.1514E+01
200	.1010E+01	.5683E+00	.1976E+01	.1002E+01	.5457E+00	.1618E+01
260	.1014E+01	.5301E+00	.2091E+01	.1004E+01	.5082E+00	.1714E+01
320	.1017E+01	.4916E+00	.2200E+01	.1006E+01	.4708E+00	.1806E+01
380	.1021E+01	.4536E+00	.2305E+01	.1008E+01	.4339E+00	.1894E+01
440	.1024E+01	.4164E+00	.2406E+01	.1010E+01	.3979E+00	.1980E+01
520	.1029E+01	.3682E+00	.2538E+01	.1013E+01	.3515E+00	.2092E+01
600	.1033E+01	.3220E+00	.2667E+01	.1016E+01	.3070E+00	.2203E+01

--- MAT U234 (922340) ENDF ID 1394

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1230E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .4641E+00 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1030E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1082E+01	.1795E+01	.2259E+02	.9922E+00	.5144E+00	.2499E+01	.9935E+00	.5315E+00	.6393E+01
20	.1120E+01	.1791E+01	.2333E+02	.9899E+00	.4987E+00	.2594E+01	.9914E+00	.5161E+00	.6627E+01
80	.1226E+01	.1763E+01	.2538E+02	.9828E+00	.4553E+00	.2861E+01	.9854E+00	.4734E+00	.7286E+01
140	.1322E+01	.1716E+01	.2725E+02	.9758E+00	.4159E+00	.3110E+01	.9794E+00	.4344E+00	.7894E+01
200	.1411E+01	.1653E+01	.2898E+02	.9690E+00	.3795E+00	.3342E+01	.9735E+00	.3980E+00	.8460E+01
260	.1494E+01	.1577E+01	.3059E+02	.9623E+00	.3456E+00	.3562E+01	.9678E+00	.3638E+00	.8993E+01
320	.1571E+01	.1492E+01	.3210E+02	.9557E+00	.3138E+00	.3771E+01	.9621E+00	.3316E+00	.9498E+01
380	.1644E+01	.1399E+01	.3353E+02	.9491E+00	.2841E+00	.3971E+01	.9566E+00	.3011E+00	.9978E+01
440	.1713E+01	.1303E+01	.3489E+02	.9427E+00	.2563E+00	.4162E+01	.9511E+00	.2725E+00	.1044E+02
520	.1800E+01	.1171E+01	.3661E+02	.9342E+00	.2219E+00	.4408E+01	.9438E+00	.2368E+00	.1102E+02
600	.1680E+01	.1038E+01	.3824E+02	.9258E+00	.1904E+00	.4642E+01	.9366E+00	.2039E+00	.1158E+02

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1158E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .1035E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1003E+01	.6656E+00	.8098E+01	.9935E+00	.5314E+00	.6375E+01
20	.1005E+01	.6514E+00	.8385E+01	.9914E+00	.5160E+00	.6609E+01
80	.1011E+01	.6103E+00	.9191E+01	.9853E+00	.4733E+00	.7267E+01
140	.1016E+01	.5704E+00	.9931E+01	.9794E+00	.4343E+00	.7872E+01
200	.1020E+01	.5313E+00	.1062E+02	.9735E+00	.3979E+00	.8437E+01
260	.1024E+01	.4926E+00	.1126E+02	.9678E+00	.3637E+00	.8969E+01
320	.1027E+01	.4547E+00	.1188E+02	.9621E+00	.3315E+00	.9472E+01
380	.1030E+01	.4277E+00	.1246E+02	.9565E+00	.3011E+00	.9951E+01
440	.1632E+01	.3819E+00	.1301E+02	.9510E+00	.2724E+00	.1041E+02
520	.1035E+01	.3360E+00	.1372E+02	.9438E+00	.2368E+00	.1099E+02
600	.1037E+01	.2925E+00	.1439E+02	.9365E+00	.2039E+00	.1155E+02

--- MAT U235 (922350) ENDF ID 1395

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1471E+02 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .5839E+03 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9844E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1083E+01	.1835E+01	.1269E+02	.9833E+00	.5407E+00	-.3356E-01	.9873E+00	.6367E+00	.1103E+01
20	.1121E+01	.1832E+01	.1307E+02	.9784E+00	.5296E+00	-.2328E-01	.9832E+00	.6277E+00	.1152E+01
80	.1228E+01	.1810E+01	.1412E+02	.9652E+00	.4974E+00	.4843E-02	.9732E+00	.5974E+00	.1283E+01
140	.1325E+01	.1767E+01	.1507E+02	.9539E+00	.4653E+00	.2774E-01	.9668E+00	.5607E+00	.1389E+01
200	.1414E+01	.1708E+01	.1594E+02	.9444E+00	.4320E+00	.4482E-01	.9638E+00	.5173E+00	.1475E+01
260	.1498E+01	.1634E+01	.1675E+02	.9368E+00	.3969E+00	.5612E-01	.9636E+00	.4681E+00	.1544E+01
320	.1577E+01	.1549E+01	.1750E+02	.9307E+00	.3605E+00	.6255E-01	.9657E+00	.4152E+00	.1599E+01
380	.1651E+01	.1457E+01	.1821E+02	.9258E+00	.3237E+00	.6575E-01	.9694E+00	.3617E+00	.1647E+01
440	.1722E+01	.1359E+01	.1888E+02	.9218E+00	.2879E+00	.6745E-01	.9740E+00	.3107E+00	.1693E+01
520	.1811E+01	.1224E+01	.1973E+02	.9176E+00	.2433E+00	.6996E-01	.9808E+00	.2501E+00	.1755E+01
600	.1893E+01	.1087E+01	.2052E+02	.9140E+00	.2035E+00	.7459E-01	.9873E+00	.1993E+00	.1823E+01

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .6970E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .6823E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9860E+00	.5816E+00	.3955E+00	.9839E+00	.5546E+00	.1305E+00
20	.9821E+00	.5709E+00	.4191E+00	.9791E+00	.5437E+00	.1463E+00
80	.9718E+00	.5392E+00	.4832E+00	.9663E+00	.5118E+00	.1892E+00
140	.9635E+00	.5063E+00	.5375E+00	.9557E+00	.4791E+00	.2242E+00
200	.9571E+00	.4710E+00	.5824E+00	.9472E+00	.4443E+00	.2512E+00
260	.9524E+00	.4331E+00	.6185E+00	.9407E+00	.4072E+00	.2707E+00
320	.9492E+00	.3933E+00	.6477E+00	.9357E+00	.3684E+00	.2842E+00
380	.9472E+00	.3530E+00	.6721E+00	.9321E+00	.3292E+00	.2939E+00
440	.9461E+00	.3137E+00	.6942E+00	.9293E+00	.2912E+00	.3019E+00
520	.9453E+00	.2650E+00	.7228E+00	.9267E+00	.2443E+00	.3131E+00
600	.9450E+00	.2215E+00	.7531E+00	.9246E+00	.2029E+00	.3268E+00

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--- MAT U236   (922360) ENDF ID (1396)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6069E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .4680E-01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5156E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1905E+01	.3750E+02	.1004E+01	.6741E+00	.1022E+03	.1003E+01	.6557E+00	.7273E+02
20	.1127E+01	.1904E+01	.3877E+02	.1005E+01	.6614E+00	.1059E+03	.1003E+01	.6427E+00	.7535E+02
80	.1237E+01	.1884E+01	.4232E+02	.1007E+01	.6245E+00	.1162E+03	.1005E+01	.6048E+00	.8270E+02
140	.1337E+01	.1843E+01	.4557E+02	.1010E+01	.5882E+00	.1257E+03	.1006E+01	.5680E+00	.8945E+02
200	.1431E+01	.1783E+01	.4857E+02	.1012E+01	.5519E+00	.1345E+03	.1008E+01	.5315E+00	.9573E+02
260	.1518E+01	.1708E+01	.5138E+02	.1015E+01	.5154E+00	.1428E+03	.1009E+01	.4951E+00	.1016E+03
320	.1601E+01	.1621E+01	.5403E+02	.1017E+01	.4788E+00	.1506E+03	.1011E+01	.4590E+00	.1072E+03
380	.1679E+01	.1526E+01	.5653E+02	.1019E+01	.4425E+00	.1580E+03	.1012E+01	.4234E+00	.1125E+03
440	.1754E+01	.1425E+01	.5892E+02	.1022E+01	.4068E+00	.1651E+03	.1013E+01	.3885E+00	.1175E+03
520	.1848E+01	.1286E+01	.6194E+02	.1025E+01	.3605E+00	.1741E+03	.1015E+01	.3435E+00	.1239E+03
600	.1935E+01	.1143E+01	.6480E+02	.1028E+01	.3158E+00	.1827E+03	.1017E+01	.3003E+00	.1300E+03

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1327E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .5203E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1055E+01	.1415E+01	.5142E+02	.1003E+01	.6559E+00	.7300E+02
20	.1079E+01	.1409E+01	.5322E+02	.1004E+01	.6428E+00	.7562E+02
80	.1146E+01	.1383E+01	.5827E+02	.1005E+01	.6049E+00	.8301E+02
140	.1208E+01	.1343E+01	.6290E+02	.1006E+01	.5682E+00	.8978E+02
200	.1265E+01	.1293E+01	.6720E+02	.1008E+01	.5317E+00	.9608E+02
260	.1319E+01	.1233E+01	.7122E+02	.1009E+01	.4953E+00	.1020E+03
320	.1370E+01	.1166E+01	.7502E+02	.1011E+01	.4591E+00	.1076E+03
380	.1418E+01	.1094E+01	.7862E+02	.1012E+01	.4235E+00	.1129E+03
440	.1464E+01	.1019E+01	.8206E+02	.1013E+01	.3887E+00	.1180E+03
520	.1521E+01	.9164E+00	.8642E+02	.1015E+01	.3437E+00	.1244E+03
600	.1575E+01	.8129E+00	.9056E+02	.1017E+01	.3005E+00	.1305E+03

--- MAT U237   (922370) ENDF ID (8237)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .9131E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .2000E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4760E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1916E+01	.2331E+02	.9924E+00	.5185E+00	.2447E+01	.9924E+00	.5177E+00	.1219E+00
20	.1128E+01	.1915E+01	.2406E+02	.9901E+00	.5029E+00	.2540E+01	.9901E+00	.5021E+00	.1310E+00
80	.1238E+01	.1897E+01	.2618E+02	.9833E+00	.4596E+00	.2802E+01	.9832E+00	.4588E+00	.1580E+00
140	.1339E+01	.1857E+01	.2811E+02	.9767E+00	.4203E+00	.3045E+01	.9765E+00	.4194E+00	.1848E+00
200	.1433E+01	.1797E+01	.2989E+02	.9701E+00	.3838E+00	.3272E+01	.9699E+00	.3830E+00	.2114E+00
260	.1521E+01	.1722E+01	.3155E+02	.9636E+00	.3497E+00	.3487E+01	.9634E+00	.3469E+00	.2379E+00
320	.1604E+01	.1635E+01	.3310E+02	.9573E+00	.3178E+00	.3691E+01	.9570E+00	.3170E+00	.2643E+00
380	.1683E+01	.1540E+01	.3457E+02	.9510E+00	.2879E+00	.3886E+01	.9507E+00	.2871E+00	.2905E+00
440	.1758E+01	.1439E+01	.3597E+02	.9448E+00	.2598E+00	.4074E+01	.9445E+00	.2591E+00	.3166E+00
520	.1852E+01	.1298E+01	.3774E+02	.9367E+00	.2251E+00	.4313E+01	.9362E+00	.2245E+00	.3511E+00
600	.1941E+01	.1155E+01	.3941E+02	.9285E+00	.1933E+00	.4543E+01	.9280E+00	.1927E+00	.3855E+00

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	REACTION TYPE 1 IS TOTAL SIGMA ZERO .4871E+03 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .4780E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.9942E+00	.5439E+00	.5660E+00	.9924E+00	.5177E+00	.1316E+00
20	.9926E+00	.5286E+00	.5895E+00	.9901E+00	.5021E+00	.1410E+00
80	.9860E+00	.4857E+00	.6567E+00	.9832E+00	.4588E+00	.1690E+00
140	.9833E+00	.4464E+00	.7200E+00	.9765E+00	.4194E+00	.1968E+00
200	.9786E+00	.4095E+00	.7803E+00	.9699E+00	.3830E+00	.2242E+00
260	.9738E+00	.3747E+00	.8381E+00	.9634E+00	.3489E+00	.2515E+00
320	.9691E+00	.3417E+00	.8939E+00	.9570E+00	.3170E+00	.2786E+00
380	.9644E+00	.3106E+00	.9479E+00	.9507E+00	.2871E+00	.3055E+00
440	.9597E+00	.2812E+00	.1000E+01	.9445E+00	.2591E+00	.3323E+00
520	.9534E+00	.2446E+00	.1068E+01	.9362E+00	.2245E+00	.3677E+00
600	.9470E+00	.2107E+00	.1134E+01	.9280E+00	.1927E+00	.4029E+00

--- MAT U238   (922380) ENDF ID (1398)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .8900E+01 BARNS			REACTION TYPE 18 IS FISSION SIGMA ZERO .5280E-05 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2700E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1913E+01	.4179E+02	.1001E+01	.6276E+00	.5246E+03	.1003E+01	.6523E+00	.1122E+03
20	.1128E+01	.1913E+01	.4321E+02	.1001E+01	.6139E+00	.5435E+03	.1004E+01	.6391E+00	.1162E+03
80	.1238E+01	.1894E+01	.4720E+02	.1001E+01	.5745E+00	.5965E+03	.1005E+01	.6009E+00	.1276E+03
140	.1339E+01	.1854E+01	.5084E+02	.1001E+01	.5367E+00	.6453E+03	.1006E+01	.5638E+00	.1380E+03
200	.1433E+01	.1794E+01	.5422E+02	.1001E+01	.4997E+00	.6905E+03	.1008E+01	.5269E+00	.1476E+03
260	.1521E+01	.1719E+01	.5737E+02	.1001E+01	.4633E+00	.7330E+03	.1009E+01	.4904E+00	.1567E+03
320	.1604E+01	.1632E+01	.6034E+02	.1001E+01	.4277E+00	.7732E+03	.1010E+01	.4542E+00	.1653E+03
380	.1682E+01	.1536E+01	.6316E+02	.1001E+01	.3931E+00	.8114E+03	.1012E+01	.4187E+00	.1735E+03
440	.1757E+01	.1435E+01	.6584E+02	.1001E+01	.3595E+00	.8478E+03	.1013E+01	.3840E+00	.1813E+03
520	.1852E+01	.1295E+01	.6924E+02	.1001E+01	.3165E+00	.8941E+03	.1014E+01	.3392E+00	.1912E+03
600	.1940E+01	.1152E+01	.7247E+02	.1001E+01	.2756E+00	.9381E+03	.1016E+01	.2963E+00	.2006E+03

	REACTION TYPE 1 IS TOTAL SIGMA ZERO .1160E+02 BARNS			REACTION TYPE 0 IS ABSORPTION SIGMA ZERO .2700E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S
0	.1069E+01	.1620E+01	.5817E+02	.1003E+01	.6523E+00	.1122E+03
20	.1099E+01	.1616E+01	.6020E+02	.1004E+01	.6391E+00	.1162E+03
80	.1184E+01	.1593E+01	.6590E+02	.1005E+01	.6009E+00	.1276E+03
140	.1262E+01	.1553E+01	.7112E+02	.1006E+01	.5638E+00	.1380E+03
200	.1334E+01	.1499E+01	.7597E+02	.1008E+01	.5269E+00	.1477E+03
260	.1401E+01	.1433E+01	.8050E+02	.1009E+01	.4904E+00	.1567E+03
320	.1465E+01	.1358E+01	.8478E+02	.1010E+01	.4542E+00	.1653E+03
380	.1526E+01	.1276E+01	.8884E+02	.1012E+01	.4187E+00	.1735E+03
440	.1584E+01	.1191E+01	.9271E+02	.1013E+01	.3840E+00	.1813E+03
520	.1657E+01	.1073E+01	.9762E+02	.1014E+01	.3392E+00	.1912E+03
600	.1725E+01	.9528E+00	.1023E+03	.1016E+01	.2963E+00	.2006E+03

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--- MAT V-NAT (230000) ENDF ID (1323)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5000E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5060E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1006E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.5212E+02	.1001E+01	.6276E+00	.5557E-01	.1045E+01	.1270E+01	.2593E+02
20	.1128E+01	.1920E+01	.5391E+02	.1001E+01	.6139E+00	.5760E-01	.1064E+01	.1263E+01	.2682E+02
80	.1238E+01	.1902E+01	.5894E+02	.1001E+01	.5745E+00	.6332E-01	.1119E+01	.1234E+01	.2933E+02
140	.1339E+01	.1862E+01	.6355E+02	.1001E+01	.5367E+00	.6851E-01	.1169E+01	.1195E+01	.3162E+02
200	.1433E+01	.1802E+01	.6781E+02	.1001E+01	.4997E+00	.7332E-01	.1216E+01	.1147E+01	.3374E+02
260	.1521E+01	.1727E+01	.7180E+02	.1001E+01	.4634E+00	.7787E-01	.1260E+01	.1092E+01	.3573E+02
320	.1605E+01	.1640E+01	.7557E+02	.1001E+01	.4278E+00	.8213E-01	.1301E+01	.1030E+01	.3760E+02
380	.1684E+01	.1545E+01	.7913E+02	.1001E+01	.3931E+00	.8619E-01	.1340E+01	.9655E+00	.3937E+02
440	.1759E+01	.1444E+01	.8253E+02	.1001E+01	.3595E+00	.9008E-01	.1378E+01	.8983E+00	.4107E+02
520	.1854E+01	.1303E+01	.8684E+02	.1001E+01	.3165E+00	.9511E-01	.1425E+01	.8067E+00	.4321E+02
600	.1943E+01	.1159E+01	.9093E+02	.1000E+01	.2756E+00	.1001E+00	.1469E+01	.7147E+00	.4525E+02

--- MAT W183 (741830) ENDF ID (1476)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3408E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1001E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1341E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1905E+01	.1494E+03	.1001E+01	.6212E+00	.3826E+02	.1023E+01	.9475E+00	.6650E+02
20	.1127E+01	.1905E+01	.1547E+03	.1000E+01	.6074E+00	.3964E+02	.1033E+01	.9370E+00	.6888E+02
80	.1237E+01	.1885E+01	.1696E+03	.9998E+00	.5680E+00	.4351E+02	.1060E+01	.9027E+00	.7554E+02
140	.1337E+01	.1844E+01	.1832E+03	.9992E+00	.5304E+00	.4707E+02	.1085E+01	.8643E+00	.8166E+02
200	.1431E+01	.1785E+01	.1959E+03	.9987E+00	.4938E+00	.5037E+02	.1108E+01	.8217E+00	.8734E+02
260	.1518E+01	.1709E+01	.2078E+03	.9982E+00	.4578E+00	.5347E+02	.1130E+01	.7758E+00	.9267E+02
320	.1601E+01	.1622E+01	.2190E+03	.9977E+00	.4226E+00	.5640E+02	.1151E+01	.7274E+00	.9771E+02
380	.1679E+01	.1527E+01	.2296E+03	.9972E+00	.3884E+00	.5919E+02	.1171E+01	.6777E+00	.1025E+03
440	.1754E+01	.1427E+01	.2398E+03	.9967E+00	.3552E+00	.6185E+02	.1189E+01	.6274E+00	.1071E+03
520	.1848E+01	.1287E+01	.2527E+03	.9960E+00	.3127E+00	.6523E+02	.1212E+01	.5602E+00	.1129E+03
600	.1936E+01	.1144E+01	.2649E+03	.9950E+00	.2724E+00	.6844E+02	.1234E+01	.4939E+00	.1184E+03

--- MAT XE124 (541240) ENDF ID (1335)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4300E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1645E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1688E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1901E+01	.1968E+03	.1004E+01	.6722E+00	.1974E+02	.1006E+01	.7035E+00	.2426E+02
20	.1127E+01	.1900E+01	.2038E+03	.1005E+01	.6595E+00	.2045E+02	.1008E+01	.6911E+00	.2512E+02
80	.1236E+01	.1880E+01	.2235E+03	.1007E+01	.6225E+00	.2245E+02	.1013E+01	.6545E+00	.2757E+02
140	.1337E+01	.1839E+01	.2416E+03	.1010E+01	.5861E+00	.2427E+02	.1018E+01	.6181E+00	.2981E+02
200	.1430E+01	.1779E+01	.2583E+03	.1012E+01	.5497E+00	.2597E+02	.1022E+01	.5810E+00	.3189E+02
260	.1517E+01	.1704E+01	.2740E+03	.1014E+01	.5131E+00	.2757E+02	.1027E+01	.5434E+00	.3385E+02
320	.1600E+01	.1617E+01	.2889E+03	.1016E+01	.4765E+00	.2907E+02	.1031E+01	.5056E+00	.3569E+02
380	.1678E+01	.1522E+01	.3030E+03	.1019E+01	.4403E+00	.3051E+02	.1036E+01	.4679E+00	.3745E+02
440	.1752E+01	.1422E+01	.3164E+03	.1021E+01	.4048E+00	.3187E+02	.1040E+01	.4307E+00	.3912E+02
520	.1845E+01	.1283E+01	.3335E+03	.1024E+01	.3585E+00	.3361E+02	.1045E+01	.3821E+00	.4125E+02
600	.1933E+01	.1141E+01	.3497E+03	.1027E+01	.3140E+00	.3526E+02	.1050E+01	.3351E+00	.4327E+02

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--- MAT XE126 (541260) ENDF ID (1339)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4311E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2200E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6511E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1918E+01	.4005E+02	.1001E+01	.6264E+00	.2130E+02	.1059E+01	.1482E+01	.3371E+02
20	.1128E+01	.1917E+01	.4141E+02	.1001E+01	.6126E+00	.2206E+02	.1085E+01	.1477E+01	.3487E+02
80	.1238E+01	.1899E+01	.4522E+02	.1001E+01	.5731E+00	.2422E+02	.1158E+01	.1451E+01	.3813E+02
140	.1339E+01	.1859E+01	.4871E+02	.1001E+01	.5353E+00	.2620E+02	.1225E+01	.1412E+01	.4110E+02
200	.1433E+01	.1800E+01	.5193E+02	.1001E+01	.4983E+00	.2804E+02	.1287E+01	.1360E+01	.4386E+02
260	.1521E+01	.1725E+01	.5494E+02	.1001E+01	.4620E+00	.2976E+02	.1345E+01	.1298E+01	.4643E+02
320	.1604E+01	.1638E+01	.5778E+02	.1001E+01	.4264E+00	.3139E+02	.1400E+01	.1228E+01	.4886E+02
380	.1683E+01	.1542E+01	.6047E+02	.1001E+01	.3918E+00	.3294E+02	.1453E+01	.1154E+01	.5117E+02
440	.1758E+01	.1441E+01	.6303E+02	.1001E+01	.3582E+00	.3442E+02	.1502E+01	.1075E+01	.5337E+02
520	.1853E+01	.1301E+01	.6628E+02	.1000E+01	.3153E+00	.3630E+02	.1565E+01	.9677E+00	.5615E+02
600	.1942E+01	.1157E+01	.6936E+02	.9996E+00	.2746E+00	.3809E+02	.1623E+01	.8588E+00	.5879E+02

--- MAT XE128 (541280) ENDF ID (1348)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4300E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .5360E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9660E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1915E+01	.3413E+02	.9995E+00	.6020E+00	.1752E+01	.1039E+01	.1187E+01	.1617E+02
20	.1128E+01	.1915E+01	.3528E+02	.9990E+00	.5877E+00	.1816E+01	.1056E+01	.1178E+01	.1672E+02
80	.1238E+01	.1897E+01	.3850E+02	.9976E+00	.5471E+00	.1996E+01	.1104E+01	.1148E+01	.1824E+02
140	.1339E+01	.1856E+01	.4143E+02	.9961E+00	.5087E+00	.2162E+01	.1149E+01	.1109E+01	.1964E+02
200	.1433E+01	.1797E+01	.4414E+02	.9947E+00	.4716E+00	.2316E+01	.1190E+01	.1061E+01	.2093E+02
260	.1521E+01	.1722E+01	.4668E+02	.9933E+00	.4356E+00	.2461E+01	.1228E+01	.1008E+01	.2214E+02
320	.1604E+01	.1635E+01	.4906E+02	.9919E+00	.4007E+00	.2599E+01	.1264E+01	.9500E+00	.2328E+02
380	.1682E+01	.1539E+01	.5132E+02	.9904E+00	.3670E+00	.2730E+01	.1298E+01	.8889E+00	.2436E+02
440	.1757E+01	.1438E+01	.5347E+02	.9889E+00	.3346E+00	.2856E+01	.1331E+01	.8259E+00	.2539E+02
520	.1852E+01	.1298E+01	.5620E+02	.9868E+00	.2935E+00	.3015E+01	.1372E+01	.7406E+00	.2669E+02
600	.1941E+01	.1155E+01	.5878E+02	.9846E+00	.2548E+00	.3168E+01	.1410E+01	.6553E+00	.2792E+02

--- MAT XE129 (541290) ENDF ID (1349)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4300E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1800E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2230E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1088E+01	.1906E+01	.3834E+02	.1002E+01	.6356E+00	.1496E+02	.1018E+01	.8806E+00	.1947E+02
20	.1127E+01	.1905E+01	.3964E+02	.1002E+01	.6220E+00	.1550E+02	.1026E+01	.8694E+00	.2015E+02
80	.1237E+01	.1886E+01	.4328E+02	.1002E+01	.5830E+00	.1701E+02	.1048E+01	.8343E+00	.2208E+02
140	.1338E+01	.1845E+01	.4660E+02	.1003E+01	.5454E+00	.1840E+02	.1067E+01	.7961E+00	.2384E+02
200	.1431E+01	.1785E+01	.4968E+02	.1003E+01	.5086E+00	.1969E+02	.1086E+01	.7548E+00	.2547E+02
260	.1519E+01	.1710E+01	.5255E+02	.1004E+01	.4722E+00	.2090E+02	.1103E+01	.7109E+00	.2700E+02
320	.1601E+01	.1623E+01	.5526E+02	.1004E+01	.4364E+00	.2205E+02	.1119E+01	.6653E+00	.2845E+02
380	.1680E+01	.1528E+01	.5783E+02	.1004E+01	.4015E+00	.2313E+02	.1135E+01	.6187E+00	.2982E+02
440	.1754E+01	.1427E+01	.6027E+02	.1005E+01	.3675E+00	.2417E+02	.1149E+01	.5719E+00	.3113E+02
520	.1848E+01	.1288E+01	.6337E+02	.1005E+01	.3239E+00	.2549E+02	.1168E+01	.5098E+00	.3279E+02
600	.1936E+01	.1145E+01	.6630E+02	.1005E+01	.2824E+00	.2675E+02	.1185E+01	.4488E+00	.3437E+02

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--- MAT XE130   (541300) ENDF ID (1350)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4281E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .6200E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1048E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1914E+01	.2472E+02	.9994E+00	.6007E+00	.2664E+00	.1036E+01	.1137E+01	.1025E+02
20	.1128E+01	.1914E+01	.2553E+02	.9989E+00	.5864E+00	.2770E+00	.1052E+01	.1129E+01	.1059E+02
80	.1238E+01	.1895E+01	.2779E+02	.9974E+00	.5457E+00	.3070E+00	.1096E+01	.1097E+01	.1153E+02
140	.1339E+01	.1855E+01	.2985E+02	.9959E+00	.5072E+00	.3350E+00	.1136E+01	.1058E+01	.1239E+02
200	.1432E+01	.1795E+01	.3175E+02	.9944E+00	.4701E+00	.3614E+00	.1208E+01	.1011E+01	.1318E+02
260	.1520E+01	.1720E+01	.3352E+02	.9929E+00	.4342E+00	.3866E+00	.1241E+01	.9595E+00	.1392E+02
320	.1603E+01	.1633E+01	.3519E+02	.9914E+00	.3993E+00	.4107E+00	.1273E+01	.9033E+00	.1462E+02
380	.1682E+01	.1538E+01	.3676E+02	.9899E+00	.3657E+00	.4338E+00	.1273E+01	.8445E+00	.1527E+02
440	.1757E+01	.1437E+01	.3826E+02	.9883E+00	.3334E+00	.4562E+00	.1302E+01	.7841E+00	.1590E+02
520	.1851E+01	.1297E+01	.4015E+02	.9861E+00	.2924E+00	.4852E+00	.1340E+01	.7026E+00	.1669E+02
600	.1940E+01	.1153E+01	.4195E+02	.9837E+00	.2538E+00	.5132E+00	.1374E+01	.6212E+00	.1744E+02

--- MAT XE131   (541310) ENDF ID (1351)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4300E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .9003E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .9433E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1090E+01	.1945E+01	.4751E+03	.1003E+01	.6461E+00	.1180E+02	.1007E+01	.7054E+00	.3292E+02
20	.1130E+01	.1945E+01	.4921E+03	.1003E+01	.6328E+00	.1222E+02	.1009E+01	.6926E+00	.3410E+02
80	.1240E+01	.1930E+01	.5399E+03	.1004E+01	.5943E+00	.1342E+02	.1015E+01	.6552E+00	.3742E+02
140	.1342E+01	.1891E+01	.5838E+03	.1005E+01	.5570E+00	.1451E+02	.1020E+01	.6178E+00	.4046E+02
200	.1437E+01	.1833E+01	.6246E+03	.1006E+01	.5202E+00	.1553E+02	.1026E+01	.5801E+00	.4329E+02
260	.1526E+01	.1758E+01	.6628E+03	.1007E+01	.4837E+00	.1648E+02	.1031E+01	.5418E+00	.4594E+02
320	.1611E+01	.1671E+01	.6990E+03	.1008E+01	.4477E+00	.1738E+02	.1035E+01	.5035E+00	.4845E+02
380	.1691E+01	.1575E+01	.7333E+03	.1009E+01	.4123E+00	.1824E+02	.1040E+01	.4653E+00	.5083E+02
440	.1767E+01	.1473E+01	.7661E+03	.1010E+01	.3779E+00	.1905E+02	.1044E+01	.4278E+00	.5311E+02
520	.1864E+01	.1331E+01	.8077E+03	.1011E+01	.3335E+00	.2009E+02	.1050E+01	.3790E+00	.5600E+02
600	.1954E+01	.1185E+01	.8473E+03	.1012E+01	.2911E+00	.2108E+02	.1055E+01	.3319E+00	.5874E+02

--- MAT XE132   (541320) ENDF ID (1352)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4300E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4400E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4740E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2803E+02	.1001E+01	.6256E+00	.3734E+01	.1081E+01	.1800E+01	.2577E+02
20	.1128E+01	.1919E+01	.2896E+02	.1001E+01	.6118E+00	.3868E+01	.1116E+01	.1798E+01	.2663E+02
80	.1238E+01	.1901E+01	.3155E+02	.1001E+01	.5723E+00	.4246E+01	.1216E+01	.1778E+01	.2902E+02
140	.1339E+01	.1861E+01	.3392E+02	.1001E+01	.5344E+00	.4593E+01	.1308E+01	.1738E+01	.3120E+02
200	.1433E+01	.1802E+01	.3611E+02	.1001E+01	.4974E+00	.4915E+01	.1393E+01	.1681E+01	.3321E+02
260	.1521E+01	.1727E+01	.3815E+02	.1001E+01	.4611E+00	.5218E+01	.1473E+01	.1609E+01	.3509E+02
320	.1605E+01	.1640E+01	.4006E+02	.1001E+01	.4256E+00	.5504E+01	.1549E+01	.1527E+01	.3686E+02
380	.1684E+01	.1544E+01	.4188E+02	.1000E+01	.3910E+00	.5776E+01	.1620E+01	.1437E+01	.3853E+02
440	.1759E+01	.1443E+01	.4361E+02	.1000E+01	.3575E+00	.6036E+01	.1688E+01	.1342E+01	.4012E+02
520	.1854E+01	.1302E+01	.4579E+02	.9998E+00	.3146E+00	.6366E+01	.1774E+01	.1211E+01	.4213E+02
600	.1943E+01	.1159E+01	.4786E+02	.9992E+00	.2739E+00	.6680E+01	.1855E+01	.1077E+01	.4403E+02

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--- MAT XE133   (541330) ENDF ID (9643)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4764E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1900E+03 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1948E+03 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2559E+02	.1001E+01	.6274E+00	.1551E+01	.1003E+01	.6590E+00	.2140E+01
20	.1128E+01	.1920E+01	.2644E+02	.1001E+01	.6136E+00	.1607E+01	.1004E+01	.6456E+00	.2215E+01
80	.1238E+01	.1902E+01	.2879E+02	.1001E+01	.5742E+00	.1764E+01	.1007E+01	.6067E+00	.2425E+01
140	.1339E+01	.1862E+01	.3093E+02	.1001E+01	.5364E+00	.1908E+01	.1009E+01	.5688E+00	.2618E+01
200	.1433E+01	.1802E+01	.3290E+02	.1001E+01	.4994E+00	.2042E+01	.1012E+01	.5313E+00	.2797E+01
260	.1521E+01	.1727E+01	.3474E+02	.1001E+01	.4631E+00	.2168E+01	.1014E+01	.4941E+00	.2965E+01
320	.1605E+01	.1640E+01	.3648E+02	.1001E+01	.4276E+00	.2287E+01	.1016E+01	.4572E+00	.3123E+01
380	.1684E+01	.1545E+01	.3811E+02	.1001E+01	.3929E+00	.2400E+01	.1018E+01	.4211E+00	.3274E+01
440	.1759E+01	.1444E+01	.3967E+02	.1001E+01	.3593E+00	.2508E+01	.1019E+01	.3858E+00	.3417E+01
520	.1854E+01	.1303E+01	.4164E+02	.1001E+01	.3163E+00	.2645E+01	.1021E+01	.3404E+00	.3599E+01
600	.1943E+01	.1159E+01	.4350E+02	.1000E+01	.2755E+00	.2775E+01	.1023E+01	.2971E+00	.3772E+01

--- MAT XE134   (541340) ENDF ID (1354)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4344E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2500E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4594E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2546E+02	.1001E+01	.6166E+00	.2731E+01	.1084E+01	.1849E+01	.2422E+02
20	.1128E+01	.1919E+01	.2630E+02	.1000E+01	.6026E+00	.2829E+01	.1121E+01	.1848E+01	.2502E+02
80	.1238E+01	.1901E+01	.2863E+02	.9998E+00	.5627E+00	.3107E+01	.1225E+01	.1829E+01	.2724E+02
140	.1339E+01	.1861E+01	.3076E+02	.9992E+00	.5246E+00	.3362E+01	.1321E+01	.1789E+01	.2927E+02
200	.1433E+01	.1802E+01	.3272E+02	.9986E+00	.4875E+00	.3599E+01	.1410E+01	.1730E+01	.3114E+02
260	.1521E+01	.1727E+01	.3456E+02	.9980E+00	.4513E+00	.3821E+01	.1493E+01	.1658E+01	.3288E+02
320	.1605E+01	.1640E+01	.3628E+02	.9973E+00	.4160E+00	.4032E+01	.1572E+01	.1573E+01	.3452E+02
380	.1684E+01	.1545E+01	.3791E+02	.9967E+00	.3818E+00	.4232E+01	.1646E+01	.1481E+01	.3607E+02
440	.1759E+01	.1443E+01	.3945E+02	.9960E+00	.3487E+00	.4423E+01	.1717E+01	.1384E+01	.3755E+02
520	.1854E+01	.1303E+01	.4141E+02	.9950E+00	.3065E+00	.4667E+01	.1807E+01	.1248E+01	.3941E+02
600	.1943E+01	.1159E+01	.4326E+02	.9937E+00	.2666E+00	.4898E+01	.1891E+01	.1110E+01	.4117E+02

--- MAT XE135   (541350) ENDF ID (1294)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .2957E+06 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2636E+07 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .2932E+07 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1384E+01	.7748E+00	-.7045E+00	.1139E+01	.3203E+00	-.9610E+00	.1164E+01	.3662E+00	-.9351E+00
20	.1456E+01	.6902E+00	-.8884E+00	.1162E+01	.2777E+00	-.1038E+01	.1192E+01	.3193E+00	-.1023E+01
80	.1637E+01	.4923E+00	-.1333E+01	.1213E+01	.1836E+00	-.1209E+01	.1256E+01	.2148E+00	-.1222E+01
140	.1770E+01	.3603E+00	-.1643E+01	.1241E+01	.1255E+00	-.1310E+01	.1295E+01	.1492E+00	-.1344E+01
200	.1861E+01	.2713E+00	-.1853E+01	.1251E+01	.8894E-01	-.1364E+01	.1312E+01	.1073E+00	-.1413E+01
260	.1919E+01	.2097E+00	-.1993E+01	.1246E+01	.6513E-01	-.1387E+01	.1314E+01	.7971E-01	-.1448E+01
320	.1952E+01	.1657E+00	-.2081E+01	.1232E+01	.4904E-01	-.1389E+01	.1305E+01	.6080E-01	-.1459E+01
380	.1965E+01	.1332E+00	-.2134E+01	.1211E+01	.3778E-01	-.1377E+01	.1287E+01	.4741E-01	-.1453E+01
440	.1964E+01	.1086E+00	-.2159E+01	.1186E+01	.2965E-01	-.1356E+01	.1264E+01	.3761E-01	-.1437E+01
520	.1945E+01	.8391E-01	-.2165E+01	.1147E+01	.2194E-01	-.1320E+01	.1228E+01	.2819E-01	-.1405E+01
600	.1914E+01	.6560E-01	-.2147E+01	.1106E+01	.1653E-01	-.1278E+01	.1188E+01	.2148E-01	-.1366E+01

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--- MAT XE136   (541360) ENDF ID (1356)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4301E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1600E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4461E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.3119E+02	.1001E+01	.6277E+00	.3405E+00	.1086E+01	.1874E+01	.3008E+02
20	.1128E+01	.1920E+01	.3223E+02	.1001E+01	.6139E+00	.3528E+00	.1124E+01	.1873E+01	.3109E+02
80	.1238E+01	.1902E+01	.3515E+02	.1001E+01	.5745E+00	.3873E+00	.1230E+01	.1854E+01	.3390E+02
140	.1339E+01	.1862E+01	.3780E+02	.1001E+01	.5367E+00	.4189E+00	.1327E+01	.1814E+01	.3646E+02
200	.1433E+01	.1802E+01	.4026E+02	.1001E+01	.4997E+00	.4483E+00	.1418E+01	.1756E+01	.3884E+02
260	.1521E+01	.1727E+01	.4256E+02	.1001E+01	.4634E+00	.4759E+00	.1503E+01	.1682E+01	.4105E+02
320	.1605E+01	.1640E+01	.4472E+02	.1001E+01	.4278E+00	.5019E+00	.1583E+01	.1597E+01	.4313E+02
380	.1684E+01	.1545E+01	.4676E+02	.1001E+01	.3931E+00	.5267E+00	.1659E+01	.1503E+01	.4511E+02
440	.1759E+01	.1444E+01	.4871E+02	.1001E+01	.3595E+00	.5504E+00	.1732E+01	.1405E+01	.4698E+02
520	.1854E+01	.1303E+01	.5117E+02	.1001E+01	.3165E+00	.5806E+00	.1823E+01	.1267E+01	.4936E+02
600	.1943E+01	.1159E+01	.5351E+02	.1000E+01	.2756E+00	.6094E+00	.1909E+01	.1127E+01	.5161E+02

--- MAT Y89   (390890) ENDF ID (9202)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3457E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1280E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4737E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2263E+02	.1001E+01	.6277E+00	.3354E+00	.1065E+01	.1571E+01	.1660E+02
20	.1128E+01	.1920E+01	.2336E+02	.1001E+01	.6139E+00	.3475E+00	.1094E+01	.1567E+01	.1714E+02
80	.1238E+01	.1902E+01	.2541E+02	.1001E+01	.5745E+00	.3815E+00	.1174E+01	.1543E+01	.1865E+02
140	.1339E+01	.1862E+01	.2728E+02	.1001E+01	.5367E+00	.4126E+00	.1248E+01	.1504E+01	.2002E+02
200	.1433E+01	.1802E+01	.2900E+02	.1001E+01	.4997E+00	.4416E+00	.1317E+01	.1450E+01	.2128E+02
260	.1521E+01	.1727E+01	.3060E+02	.1001E+01	.4634E+00	.4688E+00	.1381E+01	.1386E+01	.2246E+02
320	.1605E+01	.1640E+01	.3210E+02	.1001E+01	.4278E+00	.4945E+00	.1442E+01	.1313E+01	.2356E+02
380	.1684E+01	.1545E+01	.3353E+02	.1001E+01	.3931E+00	.5189E+00	.1499E+01	.1234E+01	.2461E+02
440	.1759E+01	.1444E+01	.3488E+02	.1001E+01	.3595E+00	.5422E+00	.1554E+01	.1151E+01	.2560E+02
520	.1854E+01	.1303E+01	.3659E+02	.1001E+01	.3165E+00	.5719E+00	.1623E+01	.1036E+01	.2685E+02
600	.1943E+01	.1159E+01	.3820E+02	.1000E+01	.2756E+00	.6004E+00	.1688E+01	.9204E+00	.2804E+02

--- MAT Y91   (390910) ENDF ID (9206)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3698E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1400E+02 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5098E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2777E+02	.1001E+01	.6277E+00	.7993E+00	.1065E+01	.1565E+01	.2037E+02
20	.1128E+01	.1920E+01	.2869E+02	.1001E+01	.6139E+00	.8281E+00	.1093E+01	.1561E+01	.2104E+02
80	.1238E+01	.1902E+01	.3126E+02	.1001E+01	.5745E+00	.9089E+00	.1173E+01	.1537E+01	.2293E+02
140	.1339E+01	.1862E+01	.3361E+02	.1001E+01	.5367E+00	.9832E+00	.1246E+01	.1498E+01	.2465E+02
200	.1433E+01	.1802E+01	.3577E+02	.1001E+01	.4997E+00	.1052E+01	.1315E+01	.1445E+01	.2624E+02
260	.1521E+01	.1727E+01	.3779E+02	.1001E+01	.4634E+00	.1117E+01	.1379E+01	.1380E+01	.2772E+02
320	.1605E+01	.1640E+01	.3969E+02	.1001E+01	.4278E+00	.1178E+01	.1439E+01	.1307E+01	.2911E+02
380	.1684E+01	.1545E+01	.4148E+02	.1001E+01	.3931E+00	.1236E+01	.1496E+01	.1229E+01	.3043E+02
440	.1759E+01	.1444E+01	.4319E+02	.1001E+01	.3595E+00	.1292E+01	.1551E+01	.1146E+01	.3169E+02
520	.1854E+01	.1303E+01	.4535E+02	.1001E+01	.3165E+00	.1362E+01	.1620E+01	.1032E+01	.3327E+02
600	.1943E+01	.1159E+01	.4740E+02	.1000E+01	.2756E+00	.1430E+01	.1684E+01	.9165E+00	.3478E+02

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--- MAT ZR-II   ENDF ID (302)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .4969E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2295E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5198E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2220E+02	.1004E+01	.6382E+00	.5056E+01	.1085E+01	.1863E+01	.2144E+02
20	.1128E+01	.1919E+01	.2292E+02	.1004E+01	.6242E+00	.5237E+01	.1123E+01	.1862E+01	.2214E+02
80	.1238E+01	.1902E+01	.2493E+02	.1006E+01	.5840E+00	.5745E+01	.1228E+01	.1843E+01	.2408E+02
140	.1339E+01	.1862E+01	.2675E+02	.1007E+01	.5457E+00	.6211E+01	.1325E+01	.1803E+01	.2585E+02
200	.1433E+01	.1802E+01	.2844E+02	.1008E+01	.5084E+00	.6645E+01	.1415E+01	.1745E+01	.2747E+02
260	.1521E+01	.1727E+01	.3000E+02	.1009E+01	.4716E+00	.7053E+01	.1499E+01	.1672E+01	.2899E+02
320	.1605E+01	.1640E+01	.3148E+02	.1010E+01	.4353E+00	.7437E+01	.1578E+01	.1587E+01	.3041E+02
380	.1684E+01	.1545E+01	.3287E+02	.1011E+01	.4000E+00	.7803E+01	.1654E+01	.1494E+01	.3176E+02
440	.1759E+01	.1443E+01	.3419E+02	.1011E+01	.3659E+00	.8153E+01	.1726E+01	.1396E+01	.3304E+02
520	.1854E+01	.1303E+01	.3586E+02	.1012E+01	.3222E+00	.8597E+01	.1817E+01	.1260E+01	.3465E+02
600	.1943E+01	.1159E+01	.3744E+02	.1012E+01	.2808E+00	.9020E+01	.1902E+01	.1120E+01	.3618E+02

--- MAT ZR-NAT   (400000) ENDF ID (1340)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6377E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1854E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6562E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2020E+02	.1001E+01	.6271E+00	.5069E+01	.1086E+01	.1883E+01	.1977E+02
20	.1128E+01	.1919E+01	.2085E+02	.1001E+01	.6134E+00	.5252E+01	.1124E+01	.1882E+01	.2041E+02
80	.1238E+01	.1901E+01	.2265E+02	.1001E+01	.5739E+00	.5764E+01	.1231E+01	.1864E+01	.2218E+02
140	.1339E+01	.1861E+01	.2429E+02	.1001E+01	.5361E+00	.6235E+01	.1330E+01	.1824E+01	.2378E+02
200	.1433E+01	.1802E+01	.2580E+02	.1001E+01	.4991E+00	.6673E+01	.1421E+01	.1765E+01	.2526E+02
260	.1521E+01	.1727E+01	.2721E+02	.1001E+01	.4628E+00	.7083E+01	.1507E+01	.1691E+01	.2664E+02
320	.1605E+01	.1640E+01	.2853E+02	.1001E+01	.4272E+00	.7471E+01	.1588E+01	.1606E+01	.2793E+02
380	.1684E+01	.1545E+01	.2977E+02	.1001E+01	.3925E+00	.7840E+01	.1664E+01	.1512E+01	.2916E+02
440	.1759E+01	.1443E+01	.3096E+02	.1001E+01	.3589E+00	.8193E+01	.1738E+01	.1413E+01	.3031E+02
520	.1854E+01	.1303E+01	.3245E+02	.1001E+01	.3160E+00	.8640E+01	.1830E+01	.1275E+01	.3178E+02
600	.1943E+01	.1159E+01	.3386E+02	.1000E+01	.2751E+00	.9066E+01	.1916E+01	.1134E+01	.3316E+02

--- MAT ZR90   (400900) ENDF ID (1385)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5729E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1124E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5740E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1979E+02	.1001E+01	.6278E+00	.1523E+02	.1089E+01	.1917E+01	.1978E+02
20	.1128E+01	.1920E+01	.2043E+02	.1001E+01	.6141E+00	.1578E+02	.1128E+01	.1917E+01	.2042E+02
80	.1238E+01	.1902E+01	.2219E+02	.1001E+01	.5746E+00	.1732E+02	.1238E+01	.1899E+01	.2218E+02
140	.1339E+01	.1862E+01	.2379E+02	.1001E+01	.5368E+00	.1873E+02	.1339E+01	.1859E+01	.2378E+02
200	.1433E+01	.1802E+01	.2526E+02	.1001E+01	.4998E+00	.2004E+02	.1432E+01	.1800E+01	.2525E+02
260	.1521E+01	.1727E+01	.2664E+02	.1001E+01	.4635E+00	.2128E+02	.1520E+01	.1725E+01	.2663E+02
320	.1605E+01	.1640E+01	.2793E+02	.1001E+01	.4279E+00	.2244E+02	.1604E+01	.1638E+01	.2791E+02
380	.1684E+01	.1545E+01	.2914E+02	.1001E+01	.3932E+00	.2355E+02	.1682E+01	.1543E+01	.2913E+02
440	.1759E+01	.1444E+01	.3030E+02	.1001E+01	.3596E+00	.2461E+02	.1758E+01	.1441E+01	.3028E+02
520	.1854E+01	.1303E+01	.3175E+02	.1001E+01	.3166E+00	.2595E+02	.1852E+01	.1301E+01	.3174E+02
600	.1943E+01	.1159E+01	.3313E+02	.1001E+01	.2757E+00	.2723E+02	.1941E+01	.1157E+01	.3312E+02

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--- MAT ZR91　(400910)　ENDF ID (1386)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .1083E+02 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .1187E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .1202E+02 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1919E+01	.1775E+02	.1001E+01	.6274E+00	.3983E+01	.1080E+01	.1792E+01	.1639E+02
20	.1128E+01	.1919E+01	.1831E+02	.1001E+01	.6137E+00	.4126E+01	.1115E+01	.1790E+01	.1691E+02
80	.1238E+01	.1901E+01	.1987E+02	.1001E+01	.5742E+00	.4529E+01	.1215E+01	.1770E+01	.1836E+02
140	.1339E+01	.1861E+01	.2128E+02	.1001E+01	.5364E+00	.4899E+01	.1306E+01	.1730E+01	.1966E+02
200	.1433E+01	.1801E+01	.2258E+02	.1001E+01	.4994E+00	.5243E+01	.1390E+01	.1673E+01	.2087E+02
260	.1521E+01	.1726E+01	.2379E+02	.1001E+01	.4631E+00	.5565E+01	.1470E+01	.1602E+01	.2199E+02
320	.1605E+01	.1639E+01	.2492E+02	.1001E+01	.4275E+00	.5870E+01	.1545E+01	.1520E+01	.2304E+02
380	.1684E+01	.1544E+01	.2599E+02	.1001E+01	.3928E+00	.6160E+01	.1616E+01	.1430E+01	.2403E+02
440	.1759E+01	.1443E+01	.2700E+02	.1001E+01	.3592E+00	.6437E+01	.1684E+01	.1336E+01	.2497E+02
520	.1853E+01	.1302E+01	.2828E+02	.1001E+01	.3162E+00	.6789E+01	.1769E+01	.1205E+01	.2616E+02
600	.1942E+01	.1158E+01	.2948E+02	.1000E+01	.2754E+00	.7123E+01	.1849E+01	.1071E+01	.2728E+02

--- MAT ZR92　(400920)　ENDF ID (1387)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .5217E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2194E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .5436E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2547E+02	.1001E+01	.6258E+00	.2671E+01	.1085E+01	.1868E+01	.2455E+02
20	.1128E+01	.1919E+01	.2631E+02	.1001E+01	.6120E+00	.2767E+01	.1123E+01	.1867E+01	.2536E+02
80	.1238E+01	.1901E+01	.2865E+02	.1001E+01	.5724E+00	.3037E+01	.1229E+01	.1848E+01	.2761E+02
140	.1339E+01	.1861E+01	.3078E+02	.1001E+01	.5346E+00	.3285E+01	.1326E+01	.1808E+01	.2967E+02
200	.1433E+01	.1802E+01	.3274E+02	.1001E+01	.4976E+00	.3516E+01	.1416E+01	.1750E+01	.3156E+02
260	.1521E+01	.1727E+01	.3457E+02	.1001E+01	.4613E+00	.3732E+01	.1500E+01	.1676E+01	.3333E+02
320	.1605E+01	.1640E+01	.3630E+02	.1001E+01	.4257E+00	.3937E+01	.1580E+01	.1591E+01	.3499E+02
380	.1684E+01	.1545E+01	.3793E+02	.1000E+01	.3911E+00	.4132E+01	.1656E+01	.1498E+01	.3656E+02
440	.1759E+01	.1443E+01	.3947E+02	.1000E+01	.3576E+00	.4318E+01	.1728E+01	.1400E+01	.3806E+02
520	.1854E+01	.1303E+01	.4143E+02	.9999E+00	.3147E+00	.4554E+01	.1819E+01	.1263E+01	.3994E+02
600	.1943E+01	.1159E+01	.4328E+02	.9993E+00	.2740E+00	.4778E+01	.1905E+01	.1123E+01	.4173E+02

--- MAT ZR93　(400930)　ENDF ID (9232)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3752E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2500E+01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6252E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2840E+02	.1001E+01	.6286E+00	.1171E+02	.1054E+01	.1404E+01	.2172E+02
20	.1128E+01	.1920E+01	.2934E+02	.1001E+01	.6149E+00	.1213E+02	.1077E+01	.1398E+01	.2246E+02
80	.1238E+01	.1902E+01	.3197E+02	.1002E+01	.5754E+00	.1331E+02	.1144E+01	.1371E+01	.2451E+02
140	.1339E+01	.1862E+01	.3437E+02	.1002E+01	.5376E+00	.1440E+02	.1204E+01	.1332E+01	.2638E+02
200	.1433E+01	.1802E+01	.3659E+02	.1002E+01	.5006E+00	.1541E+02	.1261E+01	.1282E+01	.2812E+02
260	.1521E+01	.1727E+01	.3866E+02	.1002E+01	.4642E+00	.1636E+02	.1314E+01	.1222E+01	.2974E+02
320	.1605E+01	.1640E+01	.4060E+02	.1002E+01	.4286E+00	.1725E+02	.1364E+01	.1156E+01	.3127E+02
380	.1684E+01	.1545E+01	.4245E+02	.1002E+01	.3939E+00	.1811E+02	.1411E+01	.1085E+01	.3271E+02
440	.1759E+01	.1444E+01	.4420E+02	.1002E+01	.3602E+00	.1892E+02	.1456E+01	.1010E+01	.3409E+02
520	.1854E+01	.1303E+01	.4641E+02	.1002E+01	.3171E+00	.1995E+02	.1513E+01	.9087E+00	.3583E+02
600	.1943E+01	.1159E+01	.4851E+02	.1001E+01	.2762E+00	.2094E+02	.1566E+01	.8060E+00	.3749E+02

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--- MAT ZR94　(400940)　ENDF ID (1388)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6520E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4910E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6569E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.1970E+02	.1001E+01	.6307E+00	.6039E+01	.1088E+01	.1910E+01	.1960E+02
20	.1128E+01	.1920E+01	.2033E+02	.1001E+01	.6138E+00	.6256E+01	.1127E+01	.1910E+01	.2022E+02
80	.1238E+01	.1902E+01	.2208E+02	.1001E+01	.5744E+00	.6867E+01	.1236E+01	.1892E+01	.2197E+02
140	.1339E+01	.1862E+01	.2368E+02	.1001E+01	.5366E+00	.7428E+01	.1337E+01	.1852E+01	.2356E+02
200	.1433E+01	.1802E+01	.2514E+02	.1001E+01	.4996E+00	.7949E+01	.1430E+01	.1793E+01	.2502E+02
260	.1521E+01	.1727E+01	.2651E+02	.1001E+01	.4633E+00	.8438E+01	.1518E+01	.1718E+01	.2637E+02
320	.1605E+01	.1640E+01	.2779E+02	.1001E+01	.4277E+00	.8900E+01	.1600E+01	.1631E+01	.2765E+02
380	.1684E+01	.1545E+01	.2900E+02	.1001E+01	.3930E+00	.9340E+01	.1679E+01	.1536E+01	.2885E+02
440	.1759E+01	.1443E+01	.3015E+02	.1001E+01	.3594E+00	.9759E+01	.1753E+01	.1435E+01	.2999E+02
520	.1854E+01	.1303E+01	.3160E+02	.1001E+01	.3164E+00	.1029E+02	.1847E+01	.1295E+01	.3144E+02
600	.1943E+01	.1159E+01	.3296E+02	.1000E+01	.2756E+00	.1080E+02	.1936E+01	.1152E+01	.3280E+02

--- MAT ZR95　(400950)　ENDF ID (9234)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .3806E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .4900E+00 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .4296E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2588E+02	.1001E+01	.6278E+00	.1126E+02	.1079E+01	.1773E+01	.2421E+02
20	.1128E+01	.1920E+01	.2673E+02	.1001E+01	.6141E+00	.1166E+02	.1114E+01	.1771E+01	.2501E+02
80	.1238E+01	.1902E+01	.2911E+02	.1001E+02	.5746E+00	.1280E+02	.1211E+01	.1750E+01	.2725E+02
140	.1339E+01	.1862E+01	.3127E+02	.1001E+01	.5369E+00	.1384E+02	.1301E+01	.1710E+01	.2929E+02
200	.1433E+01	.1802E+01	.3327E+02	.1001E+01	.4999E+00	.1482E+02	.1384E+01	.1654E+01	.3117E+02
260	.1521E+01	.1727E+01	.3514E+02	.1001E+01	.4635E+00	.1573E+02	.1462E+01	.1583E+01	.3293E+02
320	.1605E+01	.1640E+01	.3689E+02	.1001E+01	.4279E+00	.1659E+02	.1536E+01	.1502E+01	.3458E+02
380	.1684E+01	.1545E+01	.3855E+02	.1001E+01	.3933E+00	.1741E+02	.1606E+01	.1413E+01	.3614E+02
440	.1759E+01	.1444E+01	.4013E+02	.1001E+01	.3596E+00	.1819E+02	.1673E+01	.1320E+01	.3763E+02
520	.1854E+01	.1303E+01	.4212E+02	.1001E+02	.3166E+00	.1918E+02	.1757E+01	.1190E+01	.3951E+02
600	.1943E+01	.1159E+01	.4401E+02	.1000E+01	.2757E+00	.2013E+02	.1835E+01	.1058E+01	.4129E+02

--- MAT ZR96　(400960)　ENDF ID (1389)

	REACTION TYPE 2 IS SCATTER SIGMA ZERO .6665E+01 BARNS			REACTION TYPE 102 IS N-GAMMA SIGMA ZERO .2319E-01 BARNS			REACTION TYPE 1 IS TOTAL SIGMA ZERO .6688E+01 BARNS		
NEUTRON TEMP(C)	G	GE	S	G	GE	S	G	GE	S
0	.1089E+01	.1920E+01	.2044E+02	.1002E+01	.6307E+00	.2626E+03	.1089E+01	.1916E+01	.2128E+02
20	.1128E+01	.1920E+01	.2110E+02	.1002E+01	.6170E+00	.2720E+03	.1128E+01	.1915E+01	.2197E+02
80	.1238E+01	.1902E+01	.2293E+02	.1002E+01	.5777E+00	.2986E+03	.1237E+01	.1897E+01	.2389E+02
140	.1339E+01	.1862E+01	.2459E+02	.1002E+01	.5400E+00	.3230E+03	.1338E+01	.1857E+01	.2563E+02
200	.1433E+01	.1802E+01	.2612E+02	.1002E+01	.5030E+00	.3456E+03	.1432E+01	.1798E+01	.2723E+02
260	.1521E+01	.1727E+01	.2755E+02	.1002E+01	.4667E+00	.3669E+03	.1520E+01	.1723E+01	.2872E+02
320	.1605E+01	.1640E+01	.2889E+02	.1002E+01	.4310E+00	.3870E+03	.1603E+01	.1636E+01	.3013E+02
380	.1684E+01	.1545E+01	.3015E+02	.1003E+01	.3962E+00	.4061E+03	.1681E+01	.1541E+01	.3145E+02
440	.1759E+01	.1443E+01	.3135E+02	.1003E+01	.3624E+00	.4244E+03	.1756E+01	.1440E+01	.3271E+02
520	.1854E+01	.1303E+01	.3286E+02	.1002E+01	.3192E+00	.4475E+03	.1851E+01	.1299E+01	.3430E+02
600	.1943E+01	.1159E+01	.3429E+02	.1002E+01	.2781E+00	.4696E+03	.1939E+01	.1156E+01	.3580E+02