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ENDLを用いたアクチニド核種の高速度炉用
25群断面積セットの作成

1979年6月

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ENDL を用いたアクチニド核種の高速炉用25 群
断面積セットの作成

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(1979 年 6 月 9 日受理)

Evaluated Nuclear Data Library (ENDL) をソース・データとして、アクチニド28核種についての高速炉用 25 群断面積セットを作成した。対象とした核種は、Th-232, U-233, U-234, U-235, U-236, U-237, Np-237, Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, Pu-243, Am-241, Am-242, Am-243, Cm-242, Cm-243, Cm-244, Cm-245, Cm-246, Cm-247, Cm-248, Bk-249, Cf-249, Cf-250, Cf-251, Cf-252 および擬似核分裂生成物1種である。U-238 については ENDF/B-IV を用いた。作成した 25 群断面積を、大型 LMFBR 炉心スペクトルを用いて 1 群に縮約し、他の 1 群セットと比較した結果、特に捕獲断面積についてセット間に大きな差があることがわかった。

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Generation of an actinide isotopes cross section set for fast reactor calculations using data from ENDL and ENDF/B-IV

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(Received June 9, 1979)

A Bondarenko format 25-group cross section set of actinide isotopes was generated for the fuel cycle evaluation and the incineration study in fast reactor systems. Evaluated Nuclear Data Library of Lawrence Livermore Laboratory (U.S.) was used as the source data. The actinide isotopes treated are the following 28: Th-232, U-233, U-234, U-235, U-236, U-237, Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, Pu-243, Am-241, Am-242, Am-243, Cm-242, Cm-243, Cm-245, Cm-246, Cm-247, Cm-248, Bk-249, Cf-249, Cf-250, Cf-251, Cf-252 and a pseudo-fission product. ENDF/B-IV was used for U-238. The set was then collapsed to one energy group using a large LMFBR core spectrum for the comparison with other one-group sets.

Keywords: Group Constants, Fast Reactor, Actinides Isotopes, Incineration, ENDL Library, ENDF/B-IV Data File, Fuel Cycle, Long-term High-Level Radioactive Wastes Management

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1. 序 論

長い半減期を持つアクチノイド核種の処理方法のうち、最も有効でありしかも現実的な方法は、これらの核種を原子炉（核分裂炉と核融合炉）内で核分裂させ、半減期の短い核種又は安定な核種に変換させてしまう、いわゆる消滅処理法であろう。消滅処理方法を評価するためには、対象とする核種の中性子断面積、半減期が必要になる。アクチノイド核種の中性子断面積は1群炉定数としてはすでにいくつか発表されている^(1,2,3,4)。しかし炉特性などを計算するために必要な多数群の断面積については未だ十分なデータは発表されていない。JAERI-Fast⁽⁵⁾、ENDF/B-IVあるいはJENDL-1⁽⁶⁾などでは、アクチノイド核種の一部についてのデータしか与えていない。米国ローレンス・リバモア研究所では、1958年以来、一般的なニュートロニクス及びフォトニクス計算のために断面積データの評価作業を進めてきた。その成果はENDL (Evaluated Nuclear Data Library) として1975年に公開された^(7,8)。ENDLにはTh 232からCf 252までの、アクチノイド31核種のデータが含まれている。ENDLの使用例、他のライブラリーとの比較などが発表されていないので、その精度については不明であるが、必要なほとんどのアクチノイド核種についてのデータが与えられている事、すなわちいくつかのライブラリーから必要なデータを寄せ集めるよりも、必要な一連のデータが一貫した立場から評価されているという長所、およびENDF/B-IVフォーマットでも使用できるため既存の処理コードシステムが利用できることに着目し、長半減期アクチノイド核種についての消滅処理および燃料サイクルの評価の研究に用いるために、ENDLを主なソース・データとしてABBN型の25群断面積セットを作成した。本報告ではENDLの概要と、これをソース・データとした25群断面積セットについて述べる。

2. Evaluated Nuclear Data Library (ENDL)^(7,8)の概略

ローレンス・リバモア研究所においては、エネルギー・システムについての広範囲にわたる研究を行なっている。この研究に必要なニュートロニクスおよびフォトニクス計算のための核データを供給する目的で、ENDLの開発を行なってきた。このライブラリーは上記の研究遂行中に対象として扱う体系の組成として実際に含まれる核種に限り、使用上の便利さを考慮し出来るだけ簡潔なかたちで核データを与えているのが特長であり、ENDF/B-IVなどのような総合ライブラリーとは目的が少し異なっている。ENDLでは84核種を扱っている。このうち72核種についてはデータ編集は完了している。残り12核種については未完成である。72核種については 10^{-10} MeV から 20 MeV までの中性子による全ての可能な反応が考慮され、これらの反応の断面積、エネルギー分布、角度分布などのデータが与えられている。さらにエネルギー範囲が1 keV から 100 MeV の γ 線の反応断面積データも収めている。

評価作業を行なうためにECSIL (Experimental Cross Section Information Library) という測定データ収録ファイルが用意されていて、このファイルには中性子による反応に対するデータ(断

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面積、エネルギーおよび角度分布など)は、3000以上の文献から数百の核種に対して約100万点の測定データを収録している。そのうちの65%は全断面積測定、21%は核分裂断面積、7%は(n, r)反応断面積、残り7%はその他のデータである。文献(7)では、このファイルの中のデータから評価済データを求める方法、測定データがない場合の評価データの作成方法、ENDLに含まれている各核種毎のデータの種類およびデータ数について述べている。文献(8)にはENDLに含まれている中性子断面積全てについてのグラフおよび、核分裂当り中性子発生量($\bar{\nu}$)、弾性散乱に対する実験室系の平均散乱角($\bar{\mu}$)などのパラメーターが与えられている。ENDLのフォーマットはENDLフォーマットとENDF/Bフォーマットのいずれかを選択できる。

3. 25群断面積の作成

炉特性計算に対する要求精度とアクチニド核種の核データの精度を考慮して、ABBNセット⁽⁹⁾と同じエネルギー・グループ構造の25群セットを作成した。ENDF/B形式の核データ・ファイルからJAERI-Fast⁽⁵⁾型の炉定数作成コード・システムPROF-GROUCH-GII⁽¹⁰⁾を基本としたシステムを用いて、ENDLから無限希釈断面積、自己遮蔽因子を作成した。PROF-GROUCH-GIIによる処理の概要を以下に述べる

無限希釈断面積を求める場合には、重み関数はエネルギーが1 MeV以上では核分裂スペクトルを用い、それ以下では、1/Eスペクトルを用いている。

核種mの実効断面積を求める場合の重み関数としての中性子エネルギースペクトル $\phi_s^m(E)$ は、Bondarenko⁽⁹⁾流に媒質の全断面積のエネルギー依存性のスペクトルに対する効果も考慮して

$$\phi_s^m(E) = \frac{\phi(E)}{\sigma_t^m(E) + \sigma_0^m}, \quad \begin{aligned} \phi(E) &:= \text{核分裂スペクトル (E} \geq 1 \text{ MeV)} \\ &= \frac{1}{E} \quad (\text{E} < 1 \text{ MeV}) \end{aligned}$$

が用いられる。ここで $\sigma_t^m(E)$ は核種mの全断面積、 σ_0^m は媒質中の核種m以外の全ての核種の全断面積の核種m1個当りの巨視断面積(バックグラウンド断面積)である。これらを用いて無限希釈断面積 $\sigma_{ix}^m(\infty)$ はi群に対して

$$\sigma_{ix}^m(\infty) = \frac{\langle \sigma_x^m(E) \phi(E) \rangle_i}{\langle \phi(E) \rangle_i}$$

と表わされる。ここで $\langle \quad \rangle_i$ はi群についてのエネルギー積分を表わし、xは反応の種類(核分裂、捕獲、弾性散乱、非弾性散乱、全反応)を表わす。全断面積以外の実効断面積は σ_{ix}^m の関数として次のように表わされる。

$$\sigma_{ix}^m(\sigma_0^m) = \frac{\left\langle \sigma_x^m(E) \frac{\phi(E)}{\sigma_t^m(E) + \sigma_0^m} \right\rangle_i}{\left\langle \frac{\phi(E)}{\sigma_t^m(E) + \sigma_0^m} \right\rangle_i}$$

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炉特性計算に対する要求精度とアクチノイド核種の核データの精度を考慮して、ABBNセット⁽⁹⁾と同じエネルギー・グループ構造の25群セットを作成した。ENDF/B形式の核データ・ファイルからJAERI-Fast⁽⁵⁾型の炉定数作成コード・システムPROF-GROUCH-GII⁽¹⁰⁾を基本としたシステムを用いて、ENDLから無限希釈断面積、自己遮蔽因子を作成した。PROF-GROUCH-GIIによる処理の概要を以下に述べる

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核種mの実効断面積を求める場合の重み関数としての中性子エネルギースペクトル $\phi_s^m(E)$ は、Bondarenko⁽⁹⁾流に媒質の全断面積のエネルギー依存性のスペクトルに対する効果も考慮して

$$\phi_s^m(E) = \frac{\phi(E)}{\sigma_t^m(E) + \sigma_0^m}, \quad \begin{aligned} \phi(E) &:= \text{核分裂スペクトル (E} \geq 1 \text{ MeV)} \\ &= \frac{1}{E} \quad (\text{E} < 1 \text{ MeV}) \end{aligned}$$

が用いられる。ここで $\sigma_t^m(E)$ は核種mの全断面積、 σ_0^m は媒質中の核種m以外の全ての核種の全断面積の核種m1個当りの巨視断面積(バックグランド断面積)である。これらを用いて無限希釈断面積 $\sigma_{ix}^m(\infty)$ はi群に対して

$$\sigma_{ix}^m(\infty) = \frac{\langle \sigma_x^m(E) \phi(E) \rangle_i}{\langle \phi(E) \rangle_i}$$

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全断面積 σ_{it}^m (σ_0^m) は輸送断面積との類似性を用いて計算される。即ち拡散方程式のエネルギーについての平均操作には、拡散係数についての平均操作が入ってくる。これは輸送断面積の逆数についての平均操作を意味する。全断面積についても、輸送断面積との類似性から逆数についての平均操作が行なわれる。

$$\sigma_{it}^m (\sigma_0^m) = \frac{\left\langle \frac{\phi(E)}{\sigma_{it}^m(E) + \sigma_0^m} \right\rangle_i}{\left\langle \frac{\phi(E)}{(\sigma_{it}^m(E) + \sigma_0^m)^2} \right\rangle_i} \sigma_0^m$$

以上を用いて自己遮蔽因子は次のように定義される。

$$f_{ix}^m (\sigma_0^m) = \frac{\sigma_{ix}^m (\sigma_0^m)}{\sigma_{ix}^m (\infty)}$$

バックグラウンド断面積 σ_0^m の値、 10^4 、 10^3 、 10^2 、 10^1 、1 および 0 に対して自己遮蔽因子を計算した。なお PROF-GROUCH-GII システムでは、共鳴断面積の非分離領域のデータを処理することが出来ないため、SUPERTOG⁽¹¹⁾ の非分離領域共鳴断面積処理ルーチンを用いて改造した PROF-GROUCH-GIIC⁽¹²⁾ システムにより非分離領域の計算を行なった。

下記のアクチニド 28 核種と擬似核分裂生成物 1 種についての断面積セットを作成した。取扱った核種は

Th-232, U-233, -234, -235, -236, -237, Np-237, Pu-238, -239, -240, -241, -242, -243, Am-241, -242, -243, Cm-242, -243, -244, -245, -246, -247, -248, Bk-249, Cf-249, -250, -251, -252, simulated fps

である。U-238 については ENDF/B-IV のデータを採用した。各核種の断面積、自己遮蔽因子、非弾性散乱マクリックスなどを Appendix に示した。

4. おわりに

比較のために、これまでに公表されている 1 群断面積セットと、今回作成した 25 群 ENDL から縮約したセット、および ENDF/B-IV から縮約したセットを Table 1 に示す。Table 1 のうち ENDL と ENDF/B-IV の 1 群セットは、NEACRP で提唱しているベンチマーク・モデル大型 LMFBR⁽¹³⁾ 炉心中心中性子エネルギー・スペクトル (JAERI-Fast で計算) を重み関数として縮約したものである。FD 5 1 群セットは同じ NEACRP 炉の炉心中心スペクトルを FGL 5 で計算したものを重み関数として縮約したものである⁽⁴⁾。1 群への縮約に際しては重み関数の影響が大きい。例えば NEACRP-LMFBR と Np, Pu, Am および Cf を燃料とするアクチニド専焼炉 (ABR) のそれぞれの炉心スペクトルを重み関数として 25 群から 1 群に縮約した場合、捕獲断面積で最大 45%、核分裂断面積で最大 20% の変化がある。この例はいさゝか極端すぎるが、ORIGEN のように対象としている LMFBR がどんなものかわからないものも含め

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以上を用いて自己遮蔽因子は次のように定義される。

$$f_{ix}^m (\sigma_o^m) = \frac{\sigma_{ix}^m (\sigma_o^m)}{\sigma_{ix}^m (\infty)}$$

バックグラウンド断面積 σ_o^m の値、 10^4 、 10^3 、 10^2 、 10^1 、1 および 0 に対して自己遮蔽因子を計算した。なお PROF-GROUCH-GII システムでは、共鳴断面積の非分離領域のデータを処理することが出来ないため、SUPERTOG⁽¹¹⁾ の非分離領域共鳴断面積処理ルーチンを用いて改造した PROF-GROUCH-GIIC⁽¹²⁾ システムにより非分離領域の計算を行なった。

下記のアクチニド 28 核種と擬似核分裂生成物 1 種についての断面積セットを作成した。取扱った核種は

Th-232, U-233, -234, -235, -236, -237, Np-237, Pu-238, -239, -240, -241, -242, -243, Am-241, -242, -243, Cm-242, -243, -244, -245, -246, -247, -248, Bk-249, Cf-249, -250, -251, -252, simulated fps

である。U-238 については ENDF/B-IV のデータを採用した。各核種の断面積、自己遮蔽因子、非弾性散乱マクリックスなどを Appendix に示した。

4. おわりに

比較のために、これまでに公表されている 1 群断面積セットと、今回作成した 25 群 ENDL から縮約したセット、および ENDF/B-IV から縮約したセットを Table 1 に示す。Table 1 のうち ENDL と ENDF/B-IV の 1 群セットは、NEACRP で提唱しているベンチマーク・モデル大型 LMFBR⁽¹³⁾ 炉心中心中性子エネルギー・スペクトル (JAERI-Fast で計算) を重み関数として縮約したものである。FD 5 1 群セットは同じ NEACRP 炉の炉心中心スペクトルを FGL 5 で計算したものを重み関数として縮約したものである⁽⁴⁾。1 群への縮約に際しては重み関数の影響が大きい。例えば NEACRP-LMFBR と Np, Pu, Am および Cf を燃料とするアクチニド専焼炉 (ABR) のそれぞれの炉心スペクトルを重み関数として 25 群から 1 群に縮約した場合、捕獲断面積で最大 45%、核分裂断面積で最大 20% の変化がある。この例はいさゝか極端すぎるが、ORIGEN のように対象としている LMFBR がどんなものかわからないものも含め

て、重み関数による断面積の差異が σ_c で 30%、 σ_f で 15% 位としても、各セット間での差異特に捕獲断面積における差異が非常に大きい事が Table からわかる。捕獲断面積についてみると、同じスペクトルを使って縮約した ENDL, ENDF, FD 5 の間で、しかも U-235, U-238, Pu-239 で 20~30% も差がある。UK データ (FD 5, FISPIN) の Am 242m, Am 243, Cm 243 が他のデータと大きく異なっている。ORIGEN では Np 237, Pu 238, Am 241 が他のデータの 50% 位の値になっている。核分裂断面積はセット間でそれ程大きな差異はないが、TKSY セットの Am 243 が他のセットの値の 10 倍位大きい値を与えている。ORIGEN の Am 242 m が他のデータの 50%、Cm 243 が 10% 位と極端に小さい。Cm 242 は各セット間で値が大きく異なっている。アクチニド核種では取扱いの困難さ故に断面積測定の数も少なく、異なったライブラリーで同じ評価データを採用することもあり、値が各セット間で良い一致をしているからといって、その値が正しいとは限らない。今後は燃料サイクルにおけるバック・エンドの問題が重要になってくると思われるが、そのためにはアクチニド核種に関する精度よいデータが要求され、臨界実験装置による、サンプルを用いた積分測定がより重要になってくる。

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Table 1(a) One-group capture cross sections of actinides in fast reactors

Isotope	(unit in barns)					
	ENDL ^{††}	ENDF/B-IV ^{††}	FD5(4) ^{††}	FISPIN(2)	TKSY(3)	ORIGEN(1)
Th232	0.53		0.43	0.57		0.44
U233	0.30		0.27	0.33		0.40
U234	0.64	0.44	0.61	0.59		0.45
U235	0.72	0.72	0.53	0.51	0.62	0.57
U236	0.71		0.59	0.57	0.61	0.66
U237	0.40			0.5*		0.41
U238	0.41 [†]	0.41	0.29	0.27	0.30	0.30
Np237	1.94		1.95	1.87	1.72	0.77
Pu238	0.58		0.45	0.44	0.50	0.22
Pu239	0.71	0.64	0.55	0.51	0.47	0.50
Pu240	0.54	0.56	0.63	0.59	0.45	0.42
Pu241	0.62	0.59	0.62	0.59	0.47	0.43
Pu242	0.46	0.45	0.39	0.38	0.42	0.34
Pu243	0.46			0.5*		0.57
Am241	1.59		2.01	1.91	1.40	0.99
Am242(m)	0.46		0.11	0.10	0.65	0.40
Am243	0.55		1.73	1.70	0.91	0.56
Cm242	0.46		0.51	0.5	0.68	0.38
Cm243	0.48		0.10	0.10	0.44	0.40
Cm244	0.66		0.49	0.48	0.53	0.37
Cm245	0.48		0.5*	0.5*		0.40
Cm246	0.47		0.5*	0.5*		0.30
Cm247	0.57		0.5*	0.5*		0.36
Cm248	0.43		0.5*	0.5*		0.31
Bk249	0.53		1.7*	1.8*		0.39
Cf249	0.51		0.5*	0.5*		0.83
Cf250	0.59		0.5*	0.5*		0.42
Cf251	0.58		0.5*	0.5*		0.41
Cf252	0.46		0.5*	0.5*		0.39

Table 1(b) One-group fission cross sections of actinides in fast reactors

(unit in barns)

Isotope	ENDL ^{††}	ENDF/B-IV ^{††}	FD5(4) ^{††}	FISPIN(2)	TKSY(3)	ORIGEN(1)
Th232	0.010		0.0094	0.011		0.014
U233	3.03		2.85	2.78		3.15
U234	0.30	0.29	0.29	0.31		0.51
U235	2.15	2.12	1.98	1.94	2.05	2.03
U236	0.10		0.088	0.97	0.10	0.12
U237	0.68			2.5*		1.82
U238	0.044 [†]	0.044	0.043	0.047	0.051	0.043
Np237	0.33		0.31	0.34	0.33	0.36
Pu238	1.31		1.13	1.15	1.13	1.38
Pu239	1.94	1.94	1.83	1.82	1.90	1.85
Pu240	0.36	0.37	0.35	0.38	0.41	0.35
Pu241	2.66	2.69	2.69	2.64	3.05	2.49
Pu242	0.26	0.28	0.22	0.30	0.29	0.28
Pu243	0.81			2.5*		2.03
Am241	0.44		0.31	0.40	0.43	0.46
Am242(m)	3.97		3.33	3.33	3.74	1.83
Am243	0.24		0.19	0.19	1.97	0.24
Cm242	0.40		1.23	1.26	1.93	0.42
Cm243	2.85		2.89	3.14	2.66	0.32
Cm244	0.39		0.38	0.55	0.53	0.41
Cm245	3.03		2.3*	2.5*		2.45
Cm246	0.31		0.3*	0.4*		0.30
Cm247	2.31		2.3*	2.5*		2.15
Cm248	0.34		0.3*	0.4*		0.29
Bk249	0.17		0.2*	0.4*		0.13
Cf249	2.87		2.3*	2.5*		2.55
Cf250	0.99		0.3*	0.4*		1.22
Cf251	3.16		2.3*	2.5*		2.03
Cf252	0.68		0.3*	0.4*		1.24

Table 1(c) One-group(n,2n) cross sections of actinides in fast reactors
(unit in 10⁻³ barns)

Isotope	ENDL ^{††}	ENDF/B-IV ^{††}	FD5(4) ^{††}	FISPIN(2)	TKSY(3)	ORIGEN(1)
Th232	1.51		1.41	1.28		1.20
U233	0.47		0.77	0.79		0.25
U234	0.58	0.12	0.10	0.14		0.54
U235	0.78	0.93	0.82	0.91		1.12
U236	1.25		0.61	0.73		0.49
U237	2.27					
U238	1.53 [†]	1.53	1.22	1.43	1.4	1.53
Np237	0.36		0.13	0.17	0.29	0.10
Pu238	0.47		0.04	0.05		0.20
Pu239	1.44	1.51	0.43	0.53	0.29	0.20
Pu240	0.77	0.78	0.44	0.54		0.51
Pu241	3.43	2.09	1.40	1.5		2.10
Pu242	1.36	0.55	0.46	0.55		0.56
Pu243	5.19					
Am241	~ 0					0.04
Am242(m)	2.41					1.39
Am243	1.75					
Cm242	0.93					
Cm243	1.93					0.38
Cm244	0.97		0.10			
Cm245	1.99					
Cm246	1.60					
Cm247	3.12					
Cm248	1.77					
Bk249	1.98					
Cf249	2.12					
Cf250	1.02					
Cf251	3.65					
Cf252	0.82					

††) One group sets with double dagger are collapsed using the central spectrum of the NEACRP LMFBR benchmark model⁽¹³⁾ calculated using JAERI-Fast set for ENDL, ENDF/B-IV cases and FGL5 data for FD5 case.

†) The figures with dagger are obtained using ENDF/B-IV data.

*) The figures with asterisk are derived by the following rule:

	(FD5)	(FISPIN)		(FD5)	(FISPIN)
Capture: Even Z, any N	0.5	0.5	Fission: Even Z, Even N	0.3	0.4
Odd Z, Even N	1.7	1.8	Even Z, Odd N	2.3	2.5
Odd Z, Odd N	0.1	0.1	Odd Z, Even N	0.2	0.4
			Odd Z, Odd N	3.3	2.5

unit in barns

Appendix : Tables of 25 group cross section set of ENDL of actinide isotopes

NUCLID = TH232 MAT NO = 7164
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.29685E+00	3.25913E-01	3.13446E+00	1.17143E-02	3.35676E+00	1.76066E+00	8.41180E-01	8.26376E-01	2.66790E-02
2	7.50396E+00	1.48635E-01	2.53705E+00	2.03775E-02	4.53915E+00	2.79540E+00	4.61586E-14	8.23174E-01	2.62825E-02
3	7.50317E+00	1.28196E-01	2.32772E+00	3.07174E-02	4.50404E+00	2.84022E+00	0.0	7.13316E-01	3.19206E-02
4	6.73036E+00	1.05144E-01	2.19096E+00	8.13956E-02	3.92188E+00	2.62194E+00	0.0	5.60671E-01	2.93294E-02
5	6.79259E+00	8.82596E-03	2.11974E+00	1.35430E-01	4.65325E+00	1.99508E+00	0.0	4.47347E-01	4.65560E-02
6	7.69594E+00	0.0	0.0	1.65373E-01	6.07757E+00	1.45300E+00	0.0	2.91243E-01	8.68207E-02
7	9.56510E+00	0.0	0.0	1.39326E-01	8.33181E+00	1.07396E+00	0.0	2.89792E-03	1.19042E-01
8	1.13795E+01	0.0	0.0	2.03546E-01	1.05311E+01	6.44897E-01	0.0	2.89792E-03	1.41499E-01
9	1.29883E+01	0.0	0.0	3.39742E-01	1.24536E+01	1.95042E-01	0.0	2.89792E-03	1.48684E-01
10	1.40610E+01	0.0	0.0	5.73525E-01	1.34874E+01	0.0	0.0	2.89792E-03	1.54348E-01
11	1.47632E+01	0.0	0.0	7.65683E-01	1.39976E+01	0.0	0.0	2.89792E-03	1.62294E-01
12	1.58170E+01	0.0	0.0	9.16936E-01	1.49001E+01	0.0	0.0	2.89792E-03	1.73631E-01
13	1.61926E+01	0.0	0.0	1.36493E+00	1.48276E+01	0.0	0.0	2.89792E-03	1.78692E-01
14	1.74912E+01	0.0	0.0	2.18337E+00	1.53078E+01	0.0	0.0	2.89792E-03	2.63930E-01
15	2.28161E+01	0.0	0.0	3.71002E+00	1.91060E+01	0.0	0.0	2.89792E-03	1.47341E-01
16	3.51993E+01	0.0	0.0	1.08244E+01	2.43752E+01	0.0	0.0	2.89792E-03	8.83040E-02
17	4.11902E+01	0.0	0.0	1.62598E+01	2.49303E+01	0.0	0.0	2.89792E-03	1.08542E-01
18	6.64362E+01	0.0	0.0	2.52815E+01	4.11547E+01	0.0	0.0	2.89792E-03	1.01830E-01
19	7.36885E+01	0.0	0.0	5.65368E+01	1.71518E+01	0.0	0.0	2.89792E-03	5.12935E-01
20	9.92568E+00	0.0	0.0	9.69795E-01	8.95588E+00	0.0	0.0	2.89792E-03	1.13724E-01
21	1.07010E+01	0.0	0.0	1.43182E-01	1.05578E+01	0.0	0.0	2.89792E-03	1.22624E-01
22	1.13161E+01	0.0	0.0	2.91353E-01	1.10247E+01	0.0	0.0	2.89792E-03	1.26010E-01
23	1.20073E+01	0.0	0.0	6.26193E-01	1.13811E+01	0.0	0.0	2.89792E-03	1.30692E-01
24	1.27955E+01	0.0	0.0	1.15223E+00	1.16432E+01	0.0	0.0	2.89792E-03	1.32706E-01
25	1.36768E+01	0.0	0.0	1.70655E+00	1.17702E+01	0.0	0.0	6.63360E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = TH232 MATNO = 7164
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9984	0.9960	0.9953
2	1.0000	0.9999	0.9998	0.9986	0.9970	0.9965
3	0.9995	0.9995	0.9994	0.9984	0.9973	0.9970
4	1.0000	1.0000	1.0000	0.9997	0.9994	0.9993
5	1.0000	1.0000	1.0000	0.9998	0.9994	0.9993
6	1.0000	1.0000	0.9997	0.9980	0.9958	0.9952
7	1.0000	0.9999	0.9994	0.9966	0.9935	0.9927
8	1.0000	1.0000	0.9998	0.9988	0.9979	0.9976
9	1.0000	1.0000	0.9998	0.9990	0.9983	0.9982
10	0.9998	0.9993	0.9998	0.9996	0.9994	0.9994
11	0.9999	0.9999	0.9999	0.9997	0.9996	0.9996
12	1.0000	1.0000	0.9999	0.9995	0.9992	0.9992
13	1.0000	0.9724	0.8600	0.7391	0.6779	0.6632
14	0.9990	0.9361	0.7521	0.6240	0.5731	0.5565
15	0.9861	0.8139	0.5672	0.4564	0.3956	0.3655
16	0.9988	0.7394	0.3993	0.3157	0.2925	0.2873
17	0.9073	0.5430	0.3045	0.2478	0.2265	0.2207
18	0.6664	0.3040	0.1805	0.1464	0.1316	0.1280
19	0.8168	0.3623	0.1823	0.1539	0.1489	0.1482
20	1.0000	1.0000	0.9966	0.9749	0.9682	0.9670
21	0.9999	0.9999	0.9998	0.9994	0.9990	0.9989
22	1.0000	1.0000	1.0000	0.9997	0.9996	0.9995
23	0.9999	0.9999	0.9998	0.9996	0.9993	0.9993
24	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
25	1.0000	1.0000	0.9999	0.9995	0.9993	0.9992

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = TH232 MATNO = 7164
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.33568E+01	0.9999	0.9999	0.9996	0.9983	0.9960	0.9954
2	0.45392E+01	1.0000	1.0000	0.9998	0.9988	0.9977	0.9973
3	0.45040E+01	0.9999	0.9999	0.9998	0.9993	0.9992	0.9987
4	0.39219E+01	1.0002	1.0002	1.0002	1.0003	1.0006	1.0007
5	0.46533E+01	1.0002	1.0002	1.0001	0.9995	0.9987	0.9986
6	0.60776E+01	1.0000	1.0000	0.9997	0.9985	0.9968	0.9963
7	0.83318E+01	1.0001	1.0000	0.9996	0.9977	0.9958	0.9953
8	0.10531E+02	1.0000	1.0000	1.0000	0.9992	0.9985	0.9984
9	0.12454E+02	1.0000	1.0000	0.9999	0.9992	0.9989	0.9988
10	0.13487E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
11	0.13998E+02	1.0000	1.0000	1.0000	1.0001	0.9996	0.9995
12	0.14900E+02	1.0000	1.0000	1.0000	0.9998	0.9998	0.9998
13	0.14828E+02	0.9981	0.9836	0.9141	0.8215	0.7813	0.7736
14	0.15308E+02	0.9952	0.9606	0.8404	0.7283	0.6899	0.6822
15	0.19106E+02	0.9815	0.8785	0.6812	0.5679	0.5276	0.5168
16	0.24375E+02	0.9759	0.8403	0.5866	0.4647	0.4336	0.4283
17	0.24930E+02	0.9376	0.7140	0.4914	0.4091	0.3841	0.3790
18	0.41155E+02	0.7963	0.4590	0.2948	0.2412	0.2227	0.2189
19	0.47152E+02	0.9456	0.7820	0.6539	0.6142	0.6056	0.6042
20	0.89559E+01	1.0001	1.0002	1.0010	1.0018	1.0011	1.0009
21	0.10558E+02	0.9997	0.9997	0.9999	0.9998	0.9996	0.9995
22	0.11025E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
23	0.11381E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
24	0.11643E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
25	0.11770E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = TH232 MATNO = 7164
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.11714E-01	0.9999	0.9998	0.9995	0.9972	0.9958	0.9928
2	0.20378E-01	1.0000	0.9999	0.9995	0.9971	0.9941	0.9933
3	0.30717E-01	1.0001	1.0001	1.0003	1.0016	1.0031	1.0036
4	0.81396E-01	1.0005	1.0006	1.0008	1.0026	1.0051	1.0058
5	0.13543E+00	1.0000	1.0000	0.9998	0.9985	0.9981	0.9977
6	0.16537E+00	1.0001	1.0003	1.0004	1.0010	1.0022	1.0025
7	0.15933E+00	1.0001	1.0000	0.9998	0.9989	0.9981	0.9980
8	0.20355E+00	1.0001	1.0000	0.9998	0.9983	0.9969	0.9966
9	0.33974E+00	1.0000	0.9999	0.9994	0.9970	0.9950	0.9946
10	0.57353E+00	1.0000	1.0000	0.9998	0.9989	0.9982	0.9980
11	0.76568E+00	1.0000	1.0000	0.9999	0.9995	0.9991	0.9990
12	0.91694E+00	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989
13	0.13649E+01	0.9973	0.9757	0.8595	0.6737	0.5983	0.5857
14	0.21834E+01	0.9932	0.9425	0.7205	0.4512	0.3686	0.3566
15	0.37100E+01	0.9799	0.8555	0.5186	0.2610	0.2008	0.1933
16	0.10824E+02	0.9627	0.7464	0.3190	0.1277	0.0950	0.0911
17	0.16260E+02	0.9267	0.6225	0.2386	0.0959	0.0714	0.0685
18	0.25282E+02	0.7854	0.3889	0.1318	0.0557	0.0439	0.0427
19	0.56537E+02	0.8671	0.4568	0.1342	0.0458	0.0311	0.0292
20	0.96980E+00	0.9963	0.9664	0.8158	0.6165	0.5495	0.5396
21	0.14318E+00	1.0000	0.9999	0.9991	0.9954	0.9919	0.9912
22	0.29135E+00	1.0000	1.0000	0.9996	0.9978	0.9962	0.9959
23	0.62619E+00	1.0000	1.0000	0.9996	0.9980	0.9965	0.9963
24	0.11522E+01	1.0000	1.0000	0.9997	0.9984	0.9973	0.9971
25	0.19065E+01	1.0000	1.0000	0.9997	0.9984	0.9974	0.9972

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = TH232 MATNO = 7164
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.32591E+00	1.0000	1.0000	1.0000	0.9997	0.9991	0.9990
2	0.14864E+00	1.0000	1.0000	1.0002	1.0011	1.0025	1.0028
3	0.12820E+00	1.0001	1.0001	1.0000	0.9990	0.9979	0.9976
4	0.10514E+00	1.0001	1.0001	1.0000	0.9994	0.9986	0.9983
5	0.88260E-02	1.0000	1.0002	1.0013	1.0085	1.0182	1.0209
6	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
8	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
9	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
17	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
23	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

NUCLID = TH232 MAT NUMBER = 7164

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP ** KK **		KK = I + J - 1
	J= 1	2	
1	3.33008E+00	2.66730E-02	
2	4.91287E+00	2.62825E-02	
3	4.47211E+00	3.19205E-02	
4	3.89255E+00	2.93295E-02	
5	4.60670E+00	4.65560E-02	
6	5.99075E+00	8.68208E-02	
7	8.21277E+00	1.19042E-01	
8	1.03896E+01	1.41499E-01	
9	1.23049E+01	1.48684E-01	
10	1.33331E+01	1.54349E-01	
11	1.38353E+01	1.62294E-01	
12	1.47264E+01	1.73632E-01	
13	1.46489E+01	1.78692E-01	
14	1.50439E+01	2.63930E-01	
15	1.89587E+01	1.47342E-01	
16	2.42869E+01	8.83039E-02	
17	2.48218E+01	1.08541E-01	
18	4.10528E+01	1.01829E-01	
19	1.66388E+01	5.12935E-01	
20	8.84216E+00	1.13724E-01	
21	1.04352E+01	1.22624E-01	
22	1.08987E+01	1.26010E-01	
23	1.12505E+01	1.30692E-01	
24	1.15105E+01	1.32705E-01	
25	1.17702E+01	0.0	

TH232 MAT NUMBER = 7164

TABLE OF INELA*(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	J=	1	2	3	4	5	6	7	8	9
		11	12	13						
1	4.29933E-03	2.74793E-02	2.06513E-01	6.55316E-01	9.44422E-01	9.08756E-01	4.53217E-01	1.67310E-01	5.83394E-02	1.61419E-02
	2.64456E-03	0.0	0.0							
2	2.01235E-02	2.05165E-01	7.02659E-01	8.38745E-01	6.33710E-01	2.67758E-01	9.24192E-02	2.75695E-02	6.42336E-03	1.02222E-03
	0.0	3.33496E-14	5.89676E-14							
3	8.42849E-02	5.71320E-01	7.95289E-01	9.17946E-01	5.84742E-01	1.28096E-01	4.00079E-02	1.07315E-02	1.79917E-03	0.0
	0.0	0.0	0.0							
4	3.43478E-01	6.61177E-01	8.61751E-01	4.76972E-01	1.74850E-01	5.90029E-02	1.60336E-02	2.67269E-03	0.0	0.0
	0.0	0.0	0.0							
5	2.86763E-01	7.70608E-01	5.64432E-01	2.52217E-01	9.26077E-02	2.44282E-02	4.02727E-03	0.0	0.0	0.0
	0.0	0.0	0.0							
6	3.05629E-01	5.62394E-01	3.72735E-01	1.59233E-01	4.50961E-02	7.71084E-03	0.0	0.0	0.0	0.0
	0.0	0.0	0.0							
7	1.37873E-01	4.34413E-01	2.34780E-01	1.35226E-01	1.27671E-01	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0							
8	2.89298E-02	1.98123E-02	2.14029E-01	3.77121E-01	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0							
9	1.03945E-03	7.02923E-02	1.23710E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0							

GENERAL INFORMATION

JAERI-M 8310

NUCLID = U233 MAT NO = 7166
INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.24683E+00	2.12630E+00	3.48938E+00	5.42704E-03	3.08102E+00	7.82653E-01	2.51428E-01	8.40922E-01	2.32092E-02
2	7.52546E+00	1.57881E+00	3.05411E+00	6.19351E-03	4.13617E+00	1.80041E+00	1.87969E-03	8.23835E-01	2.24754E-02
3	7.56415E+00	1.77059E+00	2.82888E+00	1.55024E-02	4.11377E+00	1.66429E+00	0.0	7.57193E-01	2.46692E-02
4	6.69888E+00	1.87311E+00	2.68601E+00	2.97961E-02	3.60626E+00	1.18950E+00	0.0	6.28256E-01	2.33549E-02
5	6.33419E+00	1.82319E+00	2.58928E+00	6.26627E-02	3.61019E+00	8.38128E-01	0.0	3.86027E-01	3.81034E-02
6	7.17278E+00	1.88197E+00	2.52878E+00	1.28496E-01	4.78437E+00	3.77942E-01	0.0	3.11768E-01	5.01429E-02
7	8.61518E+00	2.05096E+00	2.49375E+00	2.01114E-01	6.24497E+00	1.18136E-01	0.0	2.05815E-01	7.41520E-02
8	1.00971E+01	2.20996E+00	2.47687E+00	2.23231E-01	7.64424E+00	1.96754E-02	0.0	1.14452E-01	9.34709E-02
9	1.17257E+01	2.42476E+00	2.46652E+00	2.50264E-01	9.05071E+00	0.0	0.0	8.06939E-02	1.05001E-01
10	1.35740E+01	2.97831E+00	2.46374E+00	3.32730E-01	1.02630E+01	0.0	0.0	7.28901E-03	1.19250E-01
11	1.53840E+01	3.84777E+00	2.46152E+00	4.40265E-01	1.10959E+01	0.0	0.0	2.88550E-03	1.26548E-01
12	1.69370E+01	5.02890E+00	2.46049E+00	5.82714E-01	1.13254E+01	0.0	0.0	2.88550E-03	1.29782E-01
13	1.85701E+01	6.89065E+00	2.46001E+00	7.65401E-01	1.08941E+01	0.0	0.0	2.88550E-03	1.14585E-01
14	2.02385E+01	9.48449E+00	2.45979E+00	9.26034E-01	9.82799E+00	0.0	0.0	2.88550E-03	1.13714E-01
15	2.45906E+01	1.27264E+01	2.45969E+00	1.42263E+00	1.04416E+01	0.0	0.0	2.88550E-03	1.21340E-01
16	3.14791E+01	1.78439E+01	2.45964E+00	2.47118E+00	1.11640E+01	0.0	0.0	2.88550E-03	1.29323E-01
17	4.16270E+01	2.56217E+01	2.45964E+00	3.99893E+00	1.20064E+01	0.0	0.0	2.88550E-03	1.40746E-01
18	5.61742E+01	3.73040E+01	2.45961E+00	5.71980E+00	1.31504E+01	0.0	0.0	2.88550E-03	1.56670E-01
19	8.66009E+01	6.56379E+01	2.45960E+00	6.77581E+00	1.41872E+01	0.0	0.0	2.88550E-03	1.19489E-01
20	1.39541E+02	1.08671E+02	2.45960E+00	1.79335E+01	1.29369E+01	0.0	0.0	2.88550E-03	1.17387E-01
21	1.25436E+02	9.54418E+01	2.45960E+00	1.73817E+01	1.26121E+01	0.0	0.0	2.88550E-03	1.38302E-01
22	1.78119E+02	1.18619E+02	2.45960E+00	4.62760E+01	1.32238E+01	0.0	0.0	2.88550E-03	1.39968E-01
23	4.19284E+02	3.47575E+02	2.45960E+00	6.00010E+01	1.16886E+01	0.0	0.0	2.88550E-03	1.36499E-01
24	1.45063E+02	1.23124E+02	2.45960E+00	9.52000E+00	1.24193E+01	0.0	0.0	2.88550E-03	1.43332E-01
25	1.90576E+02	1.63195E+02	2.45960E+00	1.43875E+01	1.29934E+01	0.0	0.0	6.66654E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U233 MATNO = 7166
REACTION = TOTAL
TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9999	0.9991	0.9973	0.9968	
2	0.9998	0.9998	0.9997	0.9993	0.9987	0.9985	
3	0.9997	0.9997	0.9997	0.9995	0.9993	0.9992	
4	1.0000	1.0000	0.9997	0.9979	0.9953	0.9945	
5	1.0000	1.0000	0.9997	0.9997	0.9994	0.9993	
6	1.0000	1.0000	0.9996	0.9977	0.9952	0.9945	
7	1.0000	1.0000	0.9996	0.9979	0.9959	0.9954	
8	1.0000	1.0000	0.9997	0.9985	0.9974	0.9971	
9	1.0000	1.0000	0.9995	0.9976	0.9959	0.9955	
10	1.0000	1.0000	0.9997	0.9987	0.9979	0.9978	
11	1.0000	1.0000	0.9997	0.9986	0.9977	0.9976	
12	1.0000	1.0000	0.9996	0.9984	0.9976	0.9974	
13	1.0000	0.9999	0.9995	0.9979	0.9970	0.9969	
14	1.0000	0.9999	0.9994	0.9975	0.9964	0.9962	
15	0.9999	0.9997	0.9983	0.9940	0.9919	0.9916	
16	1.0000	0.9997	0.9975	0.9915	0.9891	0.9888	
17	1.0000	0.9995	0.9961	0.9891	0.9868	0.9864	
18	0.9977	0.9827	0.9184	0.8291	0.7979	0.7934	
19	0.9867	0.9019	0.7029	0.5469	0.5058	0.5003	
20	0.9804	0.8582	0.5893	0.4141	0.3756	0.3707	
21	0.9676	0.8213	0.6286	0.5223	0.5009	0.4982	
22	0.9488	0.7328	0.5217	0.4665	0.4591	0.4582	
23	0.9725	0.8353	0.6504	0.5970	0.5904	0.5897	
24	0.9999	0.9993	0.9968	0.9949	0.9946	0.9946	
25	0.9997	0.9972	0.9880	0.9826	0.9817	0.9816	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U233 MATNO = 7166
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.30810E+01	0.9999	0.9999	0.9998	0.9999	0.9988	0.9984
2	0.41362E+01	1.0004	1.0004	1.0004	0.9999	0.9994	0.9993
3	0.41138E+01	1.0002	1.0002	1.0003	1.0005	1.0004	1.0003
4	0.36063E+01	1.0000	1.0000	0.9998	0.9985	0.9965	0.9961
5	0.36102E+01	1.0004	1.0004	1.0003	0.9998	0.9991	0.9989
6	0.47844E+01	1.0000	1.0000	0.9996	0.9978	0.9955	0.9949
7	0.62450E+01	1.0001	1.0001	0.9998	0.9985	0.9971	0.9966
8	0.76442E+01	1.0000	1.0000	0.9998	0.9990	0.9982	0.9981
9	0.90507E+01	1.0000	0.9999	0.9997	0.9985	0.9978	0.9978
10	0.10263E+02	1.0000	1.0000	0.9999	0.9999	0.9996	0.9996
11	0.11096E+02	1.0001	1.0001	1.0000	0.9997	0.9997	0.9996
12	0.11325E+02	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
13	0.10894E+02	1.0000	1.0000	0.9999	0.9997	0.9996	0.9995
14	0.98280E+01	1.0001	1.0000	1.0000	1.0000	0.9999	1.0000
15	0.10442E+02	1.0000	1.0000	0.9996	0.9991	0.9992	0.9991
16	0.11164E+02	1.0000	1.0001	0.9998	0.9990	0.9987	0.9987
17	0.12006E+02	1.0000	0.9999	0.9993	0.9998	0.9985	0.9985
18	0.13150E+02	0.9988	0.9994	0.9998	1.0016	1.0025	1.0026
19	0.14187E+02	0.9998	1.0011	1.0048	1.0062	1.0062	1.0063
20	0.12937E+02	1.0001	1.0021	1.0078	1.0080	1.0072	1.0070
21	0.12612E+02	0.9996	0.9983	1.0010	1.0065	1.0079	1.0081
22	0.13224E+02	0.9994	0.9951	0.9890	0.9870	0.9867	0.9867
23	0.11689E+02	0.9998	0.9983	0.9981	0.9989	0.9991	0.9991
24	0.12419E+02	0.9998	0.9999	0.9999	0.9997	0.9996	0.9996
25	0.12993E+02	1.0000	0.9997	0.9997	0.9992	0.9992	0.9992

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U233 MATNO = 7166
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.34270E-02	0.9998	0.9998	0.9996	0.9983	0.9964	0.9959
2	0.81935E-02	0.9999	0.9999	0.9997	0.9982	0.9964	0.9958
3	0.15502E-01	1.0004	1.0004	1.0006	1.0017	1.0031	1.0033
4	0.29796E-01	1.0014	1.0014	1.0019	1.0046	1.0086	1.0096
5	0.62683E-01	1.0005	1.0005	1.0002	0.9983	0.9958	0.9950
6	0.12850E+00	1.0000	0.9999	0.9992	0.9951	0.9897	0.9883
7	0.20111E+00	1.0001	1.0000	0.9997	0.9980	0.9963	0.9958
8	0.22323E+00	0.9999	0.9999	1.0000	1.0002	1.0004	1.0005
9	0.25026E+00	1.0000	1.0000	0.9996	0.9980	0.9966	0.9963
10	0.33273E+00	1.0000	0.9999	0.9996	0.9983	0.9974	0.9971
11	0.44027E+00	0.9999	0.9998	0.9995	0.9982	0.9972	0.9972
12	0.58271E+00	1.0001	1.0000	0.9997	0.9982	0.9973	0.9972
13	0.78540E+00	1.0001	1.0000	0.9996	0.9982	0.9972	0.9971
14	0.92603E+00	1.0000	1.0000	0.9997	0.9989	0.9984	0.9983
15	0.14226E+01	1.0000	0.9997	0.9978	0.9921	0.9893	0.9889
16	0.24712E+01	1.0000	0.9996	0.9972	0.9913	0.9887	0.9884
17	0.39989E+01	1.0000	0.9996	0.9968	0.9912	0.9892	0.9889
18	0.57198E+01	0.9979	0.9826	0.9210	0.8516	0.8304	0.8274
19	0.67758E+01	0.9886	0.9119	0.6970	0.5448	0.5095	0.5049
20	0.17934E+02	0.9873	0.9048	0.6897	0.5540	0.5263	0.5228
21	0.17382E+02	0.9701	0.8133	0.5631	0.4558	0.4367	0.4344
22	0.46276E+02	0.9570	0.7433	0.4416	0.3444	0.3313	0.3297
23	0.60001E+02	0.9807	0.8767	0.7084	0.6530	0.6459	0.6451
24	0.95200E+01	1.0000	0.9996	0.9986	0.9978	0.9977	0.9977
25	0.14388E+02	0.9996	0.9968	0.9871	0.9815	0.9806	0.9805

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U233 MATNO = 7166
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.21263E+01	0.9998	0.9998	0.9999	1.0003	1.0009	1.0011
2	0.15788E+01	1.0000	1.0000	1.0001	1.0004	1.0009	1.0010
3	0.17706E+01	1.0000	1.0000	1.0001	1.0002	1.0004	1.0005
4	0.18731E+01	1.0003	1.0003	1.0002	0.9996	1.0006	1.0004
5	0.18232E+01	1.0000	1.0000	0.9999	1.0003	1.0003	1.0003
6	0.18820E+01	1.0000	1.0000	0.9999	0.9997	0.9993	0.9991
7	0.20510E+01	0.9998	0.9998	0.9997	0.9994	0.9988	0.9986
8	0.22100E+01	0.9998	0.9998	0.9999	0.9997	0.9995	0.9994
9	0.24248E+01	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
10	0.29783E+01	0.9998	0.9998	0.9995	0.9984	0.9976	0.9974
11	0.38478E+01	0.9999	0.9999	0.9996	0.9983	0.9974	0.9972
12	0.50289E+01	1.0000	1.0001	0.9997	0.9984	0.9974	0.9973
13	0.68907E+01	1.0003	1.0003	0.9998	0.9979	0.9967	0.9966
14	0.94845E+01	0.9999	0.9999	0.9993	0.9977	0.9965	0.9963
15	0.12726E+02	1.0000	0.9999	0.9989	0.9958	0.9947	0.9945
16	0.17844E+02	0.9999	0.9997	0.9980	0.9942	0.9925	0.9923
17	0.25622E+02	0.9999	0.9996	0.9978	0.9932	0.9918	0.9916
18	0.37304E+02	0.9990	0.9895	0.9437	0.8811	0.8616	0.8589
19	0.65638E+02	0.9919	0.9374	0.7771	0.6464	0.6134	0.6089
20	0.10867E+03	0.9888	0.9155	0.7155	0.5701	0.5366	0.5323
21	0.95442E+02	0.9832	0.8936	0.7295	0.6362	0.6176	0.6152
22	0.11862E+03	0.9767	0.8578	0.6744	0.6060	0.5959	0.5947
23	0.34759E+03	0.9862	0.9125	0.7929	0.7530	0.7478	0.7472
24	0.12312E+03	1.0000	0.9996	0.9982	0.9977	0.9975	0.9975
25	0.16319E+03	0.9996	0.9983	0.9937	0.9915	0.9911	0.9908

NUCLID = U233 MAT NUMBER = 7166

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **		KK = I + J - 1
			I	J	
1	J=1	2			
1	3.05781E+00	2.32092E-02			
2	4.11370E+00	2.24754E-02			
3	4.08910E+00	2.46691E-02			
4	3.58291E+00	2.33548E-02			
5	3.57209E+00	3.81034E-02			
6	4.73423E+00	5.01430E-02			
7	6.17082E+00	7.41520E-02			
8	7.55077E+00	9.34710E-02			
9	8.94571E+00	1.05002E-01			
10	1.01437E+01	1.19250E-01			
11	1.09694E+01	1.26548E-01			
12	1.11956E+01	1.29782E-01			
13	1.07795E+01	1.14585E-01			
14	9.71427E+00	1.13714E-01			
15	1.03202E+01	1.21341E-01			
16	1.10347E+01	1.29323E-01			
17	1.18656E+01	1.40746E-01			
18	1.29938E+01	1.56670E-01			
19	1.40677E+01	1.19489E-01			
20	1.28195E+01	1.17387E-01			
21	1.24738E+01	1.38302E-01			
22	1.30839E+01	1.39968E-01			
23	1.15521E+01	1.36499E-01			
24	1.22758E+01	1.43532E-01			
25	1.29934E+01	0.0			

NUCLID = U233 MAT NUMBER = 7166
 TABLE OF INEL+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	1	11	2	12	3	4					
				13							
1	1.71265E-02	7.79913E-02	1.56122E-01	2.93895E-01	2.85613E-01	2.38734E-01	1.20912E-01	6.10965E-02	2.51129E-02	7.57884E-03	
	1.33626E-03	0.0	0.0								
2	0.0	2.27966E-01	5.54925E-01	4.98663E-01	3.40257E-01	1.26307E-01	3.83072E-02	1.11107E-02	2.48031E-03	3.90060E-04	
	0.0	1.35808E-03	2.40131E-03								
3	1.14550E-01	5.60373E-01	4.85686E-01	3.27047E-01	1.24699E-01	3.81344E-02	1.07104E-02	2.45753E-03	4.29023E-04	0.0	
	0.0	0.0	0.0								
4	3.45227E-01	3.97232E-01	2.83368E-01	1.13417E-01	3.60535E-02	1.07614E-02	2.70065E-03	4.89277E-04	0.0	0.0	
	0.0	0.0	0.0								
5	2.29211E-01	3.26107E-01	1.85312E-01	7.03095E-02	2.38058E-02	6.39121E-03	1.09156E-03	0.0	0.0	0.0	
	0.0	0.0	0.0								
6	3.40865E-02	1.61091E-01	8.54153E-02	3.55395E-02	1.00983E-02	1.71094E-03	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
7	1.33713E-02	4.00626E-02	3.03920E-02	1.50527E-02	1.12573E-02	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
8	5.58834E-04	5.85692E-04	6.80276E-03	1.17281E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0								

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NUCLID = U234 MAT NO = 7167
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.62617E+00	2.04262E+00	3.54750E+00	9.58001E-03	3.49734E+00	7.55018E-01	3.21618E-01	7.85202E-01	3.71454E-02
2	7.72262E+00	1.39589E+00	3.00475E+00	1.69683E-02	4.61299E+00	1.69677E+00	0.0	7.67647E-01	3.28541E-02
3	7.97743E+00	1.53319E+00	2.75649E+00	4.15042E-02	4.76907E+00	1.63367E+00	0.0	7.20299E-01	3.11005E-02
4	6.99160E+00	1.50175E+00	2.60539E+00	9.81078E-02	4.01677E+00	1.37497E+00	0.0	5.93442E-01	2.72831E-02
5	6.81250E+00	1.20971E+00	2.50246E+00	2.13600E-01	4.26017E+00	1.12902E+00	0.0	3.85352E-01	4.72730E-02
6	7.77784E+00	7.49267E-01	2.44524E+00	2.43260E-01	6.24355E+00	5.41764E-01	0.0	3.11038E-01	6.90829E-02
7	9.45364E+00	1.46741E-01	2.40834E+00	2.33482E-01	8.90707E+00	1.66349E-01	0.0	2.05648E-01	1.04281E-01
8	1.09103E+01	4.70136E-02	2.38852E+00	3.03614E-01	1.04876E+01	7.21347E-02	0.0	1.14754E-01	1.24220E-01
9	1.18427E+01	0.0	0.0	4.86742E-01	1.13303E+01	2.57382E-02	0.0	8.09295E-02	1.23462E-01
10	1.25204E+01	0.0	0.0	7.71232E-01	1.17490E+01	1.47825E-04	0.0	7.38736E-03	1.32259E-01
11	1.29901E+01	0.0	0.0	1.04684E+00	1.19433E+01	0.0	0.0	2.87319E-03	1.34729E-01
12	1.33809E+01	0.0	0.0	1.38087E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34694E-01
13	1.39407E+01	0.0	0.0	1.94070E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.33704E-01
14	1.50184E+01	0.0	0.0	3.01836E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34741E-01
15	1.59447E+01	0.0	0.0	3.94474E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34696E-01
16	1.63355E+01	0.0	0.0	4.33550E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.33704E-01
17	1.67730E+01	0.0	0.0	4.77304E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34740E-01
18	1.77280E+01	0.0	0.0	5.72795E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34696E-01
19	1.94563E+01	0.0	0.0	7.45629E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.33704E-01
20	2.16913E+01	0.0	0.0	9.69133E+00	1.20000E+01	0.0	0.0	2.87319E-03	1.34740E-01
21	2.46610E+01	0.0	0.0	1.26610E+01	1.20000E+01	0.0	0.0	2.87319E-03	1.34696E-01
22	2.86582E+01	0.0	0.0	1.66582E+01	1.20000E+01	0.0	0.0	2.87319E-03	1.33704E-01
23	3.39154E+01	0.0	0.0	2.19154E+01	1.20000E+01	0.0	0.0	2.87319E-03	1.34736E-01
24	4.10591E+01	0.0	0.0	2.90591E+01	1.20000E+01	0.0	0.0	2.87319E-03	1.34692E-01
25	5.09179E+01	0.0	0.0	3.89179E+01	1.20000E+01	0.0	0.0	6.56558E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U234 MATNO = 7167
 REACTION = TOTAL
 TEMPERATURE = 300, K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9997	0.9974	0.9939	0.9929	
2	1.0000	1.0000	0.9999	0.9990	0.9977	0.9974	
3	0.9995	0.9995	0.9994	0.9993	0.9991	0.9990	
4	0.9998	0.9998	0.9996	0.9983	0.9963	0.9958	
5	1.0000	1.0000	0.9999	0.9990	0.9979	0.9976	
6	1.0000	1.0000	0.9998	0.9990	0.9980	0.9978	
7	1.0000	0.9999	0.9995	0.9973	0.9950	0.9944	
8	1.0000	1.0000	0.9999	0.9992	0.9986	0.9985	
9	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993	
10	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997	
11	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998	
12	0.9999	0.9999	0.9999	0.9998	0.9998	0.9998	
13	0.9998	0.9998	0.9997	0.9995	0.9993	0.9993	
14	1.0000	0.9999	0.9998	0.9991	0.9987	0.9986	
15	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	
16	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	
17	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	
18	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989	
19	1.0000	1.0000	0.9998	0.9990	0.9986	0.9985	
20	1.0000	1.0000	0.9996	0.9986	0.9981	0.9980	
21	1.0000	0.9999	0.9994	0.9980	0.9972	0.9970	
22	1.0000	0.9999	0.9992	0.9972	0.9964	0.9962	
23	1.0000	0.9999	0.9988	0.9965	0.9956	0.9954	
24	1.0000	0.9998	0.9982	0.9949	0.9938	0.9936	
25	1.0000	0.9996	0.9975	0.9938	0.9928	0.9926	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U234 MATNO = 7167

REACTION = ELASTIC

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.34973E+01	0.9998	0.9998	0.9993	0.9976	0.9945	0.9936
2	0.46130E+01	0.9999	0.9999	0.9998	0.9991	0.9984	0.9981
3	0.47691E+01	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997
4	0.40168E+01	1.0000	1.0000	0.9999	0.9995	0.9983	0.9979
5	0.42602E+01	1.0000	1.0000	0.9997	0.9987	0.9973	0.9970
6	0.62435E+01	1.0000	1.0000	0.9997	0.9981	0.9962	0.9957
7	0.89071E+01	1.0001	1.0000	0.9997	0.9981	0.9969	0.9965
8	0.10488E+02	1.0000	1.0000	0.9997	0.9995	0.9991	0.9991
9	0.11330E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.11749E+02	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
11	0.11943E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.12000E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
13	0.12000E+02	1.0000	1.0000	1.0000	0.9998	0.9997	0.9996
14	0.12000E+02	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
15	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16	0.12000E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
17	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.12000E+02	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997
19	0.12000E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
20	0.12000E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
21	0.12000E+02	1.0000	1.0000	0.9999	0.9998	0.9997	0.9997
22	0.12000E+02	1.0000	1.0000	0.9999	0.9997	0.9998	0.9998
23	0.12000E+02	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999
24	0.12000E+02	1.0000	1.0000	0.9999	0.9998	0.9998	0.9998
25	0.12000E+02	1.0000	1.0000	0.9998	0.9998	0.9999	0.9999

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U234 MATNO = 7167

REACTION = CAPTURE

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.95800E-02	0.9997	0.9997	0.9993	0.9971	0.9937	0.9927
2	0.16968E-01	1.0000	0.9999	0.9997	0.9978	0.9955	0.9950
3	0.41504E-01	1.0005	1.0005	1.0007	1.0019	1.0034	1.0038
4	0.98108E-01	1.0009	1.0010	1.0019	1.0072	1.0141	1.0161
5	0.21360E+00	1.0002	1.0001	0.9999	0.9986	0.9969	0.9965
6	0.24326E+00	1.0002	1.0002	1.0003	1.0007	1.0012	1.0013
7	0.23348E+00	1.0000	1.0000	0.9998	0.9990	0.9981	0.9979
8	0.30361E+00	1.0000	1.0000	0.9998	0.9987	0.9978	0.9976
9	0.48674E+00	1.0000	1.0000	0.9996	0.9982	0.9969	0.9966
10	0.77123E+00	1.0000	1.0000	0.9998	0.9992	0.9987	0.9986
11	0.10468E+01	1.0000	1.0000	0.9999	0.9996	0.9993	0.9992
12	0.13809E+01	1.0000	1.0000	0.9999	0.9999	0.9996	0.9996
13	0.19407E+01	1.0000	1.0000	0.9998	0.9989	0.9983	0.9982
14	0.30184E+01	1.0000	0.9999	0.9995	0.9979	0.9968	0.9965
15	0.39447E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
16	0.43355E+01	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
17	0.47730E+01	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
18	0.57279E+01	1.0000	1.0000	0.9997	0.9988	0.9982	0.9981
19	0.74563E+01	1.0000	1.0000	0.9996	0.9985	0.9980	0.9979
20	0.96913E+01	1.0000	0.9999	0.9995	0.9984	0.9977	0.9975
21	0.12661E+02	1.0000	0.9999	0.9994	0.9977	0.9969	0.9968
22	0.16658E+02	1.0000	0.9999	0.9992	0.9973	0.9965	0.9963
23	0.21915E+02	1.0000	0.9999	0.9990	0.9969	0.9961	0.9960
24	0.29059E+02	1.0000	0.9999	0.9986	0.9962	0.9954	0.9953
25	0.38918E+02	1.0000	0.9997	0.9982	0.9954	0.9951	0.9950

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U234 MATNO = 7167
 REACTION = FISSION
 TEMPERATURE = 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	
1	0.20426E+01	0.9999	0.9999	1.0001	1.0015	1.0034	1.0040
2	0.13959E+01	1.0000	1.0000	1.0000	0.9999	1.0000	0.9999
3	0.15332E+01	1.0004	1.0004	1.0003	1.0005	1.0006	1.0006
4	0.15018E+01	1.0000	1.0000	1.0000	0.9993	0.9985	0.9983
5	0.12097E+01	1.0002	1.0003	1.0003	1.0005	1.0007	1.0008
6	0.74927E+00	1.0000	1.0001	1.0010	1.0058	1.0118	1.0133
7	0.14674E+00	1.0001	1.0003	1.0020	1.0113	1.0213	1.0237
8	0.47014E-01	1.0000	1.0001	1.0011	1.0060	1.0111	1.0123
9	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
17	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
23	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

NUCLID = U234 MAT NUMBER = 7167

TABLE OF ELASTIC MATRICES

GROUP	J =	EXIT GROUP ** KK **		KK = I + J - 1
		1	2	
1	1	3.46019E+00	3.71454E-02	
2	1	4.56013E+00	3.28540E-02	
3	1	4.73797E+00	3.11004E-02	
4	1	3.98949E+00	2.72831E-02	
5	1	4.21290E+00	4.72731E-02	
6	1	6.17447E+00	6.90827E-02	
7	1	8.60279E+00	1.04281E-01	
8	1	1.03633E+01	1.24221E-01	
9	1	1.12068E+01	1.23463E-01	
10	1	1.16167E+01	1.32239E-01	
11	1	1.18085E+01	1.34729E-01	
12	1	1.18653E+01	1.34694E-01	
13	1	1.18663E+01	1.33704E-01	
14	1	1.18653E+01	1.34740E-01	
15	1	1.18653E+01	1.34696E-01	
16	1	1.18663E+01	1.33704E-01	
17	1	1.18653E+01	1.34740E-01	
18	1	1.18653E+01	1.34696E-01	
19	1	1.18663E+01	1.33704E-01	
20	1	1.18653E+01	1.34740E-01	
21	1	1.18653E+01	1.34696E-01	
22	1	1.18663E+01	1.33704E-01	
23	1	1.18653E+01	1.34736E-01	
24	1	1.18653E+01	1.34692E-01	
25	1	1.20000E+01	0.0	

NUCLID = U234 MAT NUMBER = 7167

TABLE OF INELASTIC MATRICES

GROUP	J=	EXIT	GROUP	**	KK	**	KK	=	I	+	J	-	1	4	5	6	7	8	9	10
1	1	3,93565E-02	4,46171E-03	1,00836E-01	2,97353E-01	2,89474E-01	2,16404E-01	2,15150E-01	1,34933E-01	6,68643E-02	2,57605E-02	5,66092E-03								
2	11	1,02109E-02	1,18285E-01	4,18179E-01	5,13149E-01	3,91676E-01	1,66066E-01	5,74254E-02	1,71456E-02	3,99649E-03	6,36113E-04									
3	1	4,46729E-02	3,31848E-01	4,57712E-01	4,70392E-01	2,21194E-01	7,36596E-02	2,30004E-02	6,16131E-03	1,03248E-03	0,0									
4	1	1,87237E-01	3,48446E-01	4,36437E-01	2,57758E-01	9,94258E-02	3,45561E-02	9,51637E-03	1,59337E-03	0,0										
5	1	1,38108E-01	2,50897E-01	2,13217E-01	1,00553E-01	2,84031E-01	7,19518E-02	7,02644E-02	0,0											
6	1	2,03479E-02	9,57037E-02	2,68078E-03	2,76711E-01	6,92488E-02	7,70022E-02	0,0	0,0	0,0	0,0									
7	1	1,00107E-01	6,52423E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0									
8	1	3,50674E-02	0,0	0,0	0,0	0,0	1,30293E-02	2,30380E-02	0,0	0,0	0,0									
9	1	0,0	0,0	0,0	0,0	0,0	9,29793E-03	1,64403E-02	0,0	0,0	0,0									
10	1	0,0	0,0	0,0	0,0	5,34019E-05	9,44235E-05	0,0	0,0	0,0	0,0									

NUCLID = U235 MAT NO = 7168
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.43583E+00	1.66998E+00	3.58354E+00	7.37946E+03	3.40088E+00	9.64161E-01	3.93427E-01	7.85243E-01	3.56907E-02
2	7.56336E+00	1.11288E+00	3.06094E+00	1.14308E-02	4.49227E+00	1.93834E+00	8.43788E-03	7.67648E-01	3.17196E-02
3	7.77908E+00	1.22179E+00	2.80526E+00	2.25288E-02	4.54400E+00	1.99076E+00	0.0	7.20573E-01	2.92645E-02
4	7.03298E+00	1.26792E+00	2.64946E+00	5.67131E-02	3.89509E+00	1.81325E+00	0.0	5.92861E-01	2.65296E-02
5	6.78817E+00	1.19536E+00	2.54113E+00	1.04169E-01	4.00051E+00	1.48813E+00	0.0	3.85984E-01	4.31521E-02
6	7.83921E+00	1.12969E+00	2.47463E+00	1.52345E-01	5.37565E+00	1.18153E+00	0.0	3.11856E-01	5.52713E-02
7	9.12369E+00	1.27819E+00	2.43648E+00	2.59124E-01	6.77540E+00	8.10978E-01	0.0	2.06571E-01	7.64689E-02
8	1.08596E+01	1.44532E+00	2.41838E+00	3.89597E-01	8.50091E+00	5.23751E-01	0.0	1.13995E-01	1.06765E-01
9	1.27395E+01	1.72558E+00	2.40836E+00	6.03694E-01	1.00989E+01	3.11306E-01	0.0	8.08144E-02	1.12019E-01
10	1.39087E+01	2.11408E+00	2.40300E+00	8.26619E-01	1.08646E+01	1.03367E-01	0.0	7.32059E-03	1.24513E-01
11	1.54454E+01	2.75657E+00	2.40053E+00	1.02709E+00	1.16611E+01	5.83075E-04	0.0	2.86098E-03	1.34114E-01
12	1.70889E+01	3.68787E+00	2.39940E+00	1.23577E+00	1.21652E+01	0.0	0.0	2.86098E-03	1.37425E-01
13	1.89191E+01	5.01212E+00	2.39886E+00	1.53249E+00	1.23745E+01	0.0	0.0	2.86098E-03	1.37963E-01
14	2.28494E+01	7.00137E+00	2.39861E+00	3.37642E+00	1.24716E+01	0.0	0.0	2.86098E-03	1.39752E-01
15	3.04251E+01	1.10025E+01	2.39850E+00	6.72442E+00	1.26982E+01	0.0	0.0	2.86098E-03	1.43672E-01
16	3.85905E+01	1.69991E+01	2.39844E+00	8.64121E+00	1.29502E+01	0.0	0.0	2.86098E-03	1.44529E-01
17	4.36895E+01	2.05373E+01	2.39842E+00	1.00723E+01	1.30799E+01	0.0	0.0	2.86098E-03	1.46695E-01
18	6.23341E+01	3.43830E+01	2.39841E+00	1.50603E+01	1.28908E+01	0.0	0.0	2.86098E-03	1.29245E-01
19	7.96380E+01	4.31136E+01	2.39840E+00	2.40117E+01	1.25126E+01	0.0	0.0	2.86098E-03	1.42456E-01
20	1.08691E+02	5.12060E+01	2.39840E+00	4.50823E+01	1.24021E+01	0.0	0.0	2.86098E-03	1.21275E-01
21	9.67394E+01	4.80371E+01	2.39840E+00	3.72402E+01	1.14621E+01	0.0	0.0	2.86098E-03	1.31495E-01
22	3.69756E+01	1.71479E+01	2.39840E+00	7.04606E+00	1.27816E+01	0.0	0.0	2.86098E-03	1.50281E-01
23	6.33412E+01	3.69182E+01	2.39840E+00	1.24147E+01	1.40083E+01	0.0	0.0	2.86098E-03	1.60608E-01
24	8.96517E+01	6.75052E+01	2.39840E+00	7.56661E+00	1.45800E+01	0.0	0.0	2.86098E-03	1.64814E-01
25	2.08975E+02	1.60340E+02	2.39840E+00	3.37886E+01	1.48463E+01	0.0	0.0	6.55722E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U235 MATNO = 7168
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000,	1000,	100,	10,	1,	0.
1	1.0000	1.0000	0.9998	0.9985	0.9961	0.9954
2	1.0000	1.0000	0.9999	0.9993	0.9983	0.9981
3	0.9995	0.9995	0.9995	0.9994	0.9993	0.9993
4	1.0000	1.0000	0.9998	0.9989	0.9977	0.9974
5	1.0000	1.0000	0.9999	0.9996	0.9991	0.9989
6	1.0000	1.0000	0.9996	0.9976	0.9951	0.9945
7	1.0000	1.0000	0.9999	0.9991	0.9984	0.9982
8	1.0000	0.9999	0.9993	0.9964	0.9936	0.9930
9	1.0000	1.0000	0.9998	0.9990	0.9983	0.9981
10	1.0000	0.9999	0.9998	0.9994	0.9991	0.9991
11	1.0000	1.0000	0.9997	0.9987	0.9980	0.9979
12	1.0000	1.0000	0.9998	0.9993	0.9989	0.9988
13	1.0000	0.9999	0.9995	0.9977	0.9966	0.9964
14	1.0000	0.9999	0.9990	0.9963	0.9948	0.9946
15	0.9999	0.9993	0.9868	0.9534	0.9409	0.9390
16	0.9999	0.9986	0.9770	0.9339	0.9205	0.9186
17	1.0000	0.9999	0.9757	0.9315	0.9183	0.9165
18	0.9981	0.9363	0.7369	0.5641	0.5122	0.5047
19	0.9905	0.8567	0.5655	0.3910	0.3517	0.3465
20	0.9631	0.7247	0.4572	0.3451	0.3220	0.3190
21	0.9685	0.7466	0.4300	0.3032	0.2793	0.2762
22	0.9992	0.9805	0.8408	0.6917	0.6510	0.6454
23	0.9968	0.9709	0.8061	0.6726	0.6500	0.6473
24	0.9998	0.9977	0.9872	0.9760	0.9736	0.9734
25	0.9977	0.9866	0.9408	0.9083	0.9030	0.9024

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U235 MATNO = 7168
 REACTION = ELASTIC
 TEMPERATURE = 300, K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000,	1000,	100,	10,	1,	0,
1	0,34009E+01	0,9999	0,9998	0,9996	0,9982	0,9960	0,9955
2	0,44923E+01	0,9999	0,9999	0,9998	0,9993	0,9985	0,9983
3	0,45440E+01	1,0000	1,0000	1,0000	0,9998	1,0000	0,9999
4	0,38951E+01	1,0002	1,0002	1,0001	0,9997	0,9992	0,9991
5	0,40005E+01	1,0002	1,0002	1,0001	0,9995	0,9987	0,9987
6	0,53756E+01	1,0001	1,0001	0,9997	0,9979	0,9958	0,9952
7	0,67754E+01	1,0000	1,0000	0,9999	0,9992	0,9987	0,9986
8	0,85009E+01	1,0001	1,0000	0,9996	0,9978	0,9958	0,9954
9	0,10099E+02	1,0000	1,0000	1,0000	0,9997	0,9992	0,9992
10	0,10865E+02	1,0000	1,0000	1,0000	0,9999	0,9997	0,9997
11	0,11661E+02	0,9998	0,9998	1,0000	0,9998	0,9996	0,9995
12	0,12165E+02	1,0000	1,0000	0,9999	0,9999	0,9999	0,9999
13	0,12375E+02	1,0000	0,9999	1,0000	0,9999	0,9999	0,9998
14	0,12472E+02	1,0000	1,0000	0,9999	1,0000	0,9999	0,9999
15	0,12698E+02	0,9998	1,0001	1,0000	0,9995	0,9993	0,9993
16	0,12950E+02	0,9999	1,0000	1,0000	0,9998	0,9997	0,9997
17	0,13080E+02	0,9998	1,0000	1,0000	1,0000	1,0000	1,0000
18	0,12891E+02	0,9992	0,9963	0,9866	0,9771	0,9739	0,9734
19	0,12513E+02	0,9975	0,9839	0,9495	0,9254	0,9194	0,9185
20	0,12402E+02	0,9931	0,9604	0,9087	0,8834	0,8780	0,8773
21	0,11462E+02	0,9979	0,9901	0,9742	0,9649	0,9627	0,9624
22	0,12782E+02	0,9993	0,9998	0,9996	0,9963	0,9943	0,9939
23	0,14008E+02	1,0001	0,9999	0,9984	0,9965	0,9960	0,9960
24	0,14580E+02	0,9998	1,0000	0,9999	0,9995	0,9994	0,9994
25	0,14846E+02	1,0001	0,9999	0,9995	0,9993	0,9992	0,9992

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U235 MATNO = 7168
 REACTION = CAPTURE
 TEMPERATURE = 300, K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000,	1000,	100,	10,	1,	0,
1	0,73795E-02	0,9999	0,9999	0,9995	0,9974	0,9944	0,9937
2	0,11431E-01	0,9999	0,9999	0,9996	0,9975	0,9950	0,9944
3	0,22529E-01	1,0004	1,0005	1,0007	1,0018	1,0033	1,0035
4	0,56713E-01	1,0013	1,0013	1,0018	1,0043	1,0075	1,0084
5	0,10417E+00	0,9999	0,9999	0,9997	0,9981	0,9959	0,9957
6	0,15234E+00	1,0000	0,9999	0,9994	0,9958	0,9914	0,9903
7	0,25912E+00	1,0000	1,0000	0,9996	0,9979	0,9959	0,9954
8	0,38960E+00	1,0000	0,9999	0,9992	0,9958	0,9926	0,9922
9	0,60369E+00	1,0000	1,0000	0,9997	0,9984	0,9974	0,9972
10	0,82662E+00	0,9998	0,9998	0,9997	0,9992	0,9988	0,9987
11	0,10271E+01	1,0000	1,0000	0,9997	0,9986	0,9978	0,9977
12	0,12358E+01	0,9998	0,9998	0,9997	0,9992	0,9990	0,9989
13	0,15325E+01	1,0000	0,9998	0,9982	0,9929	0,9897	0,9891
14	0,33764E+01	1,0000	0,9997	0,9979	0,9927	0,9900	0,9896
15	0,67244E+01	0,9998	0,9999	0,9973	0,9906	0,9878	0,9874
16	0,86412E+01	1,0002	1,0002	0,9990	0,9965	0,9956	0,9955
17	0,10072E+02	1,0000	1,0002	0,9999	0,9994	0,9993	0,9993
18	0,15060E+02	0,9938	0,9498	0,7840	0,6216	0,5762	0,5698
19	0,24012E+02	0,9855	0,8882	0,6091	0,4180	0,3760	0,3704
20	0,45082E+02	0,9658	0,7838	0,4701	0,3266	0,2996	0,2962
21	0,37240E+02	0,9764	0,8363	0,5202	0,3368	0,3002	0,2955
22	0,70461E+01	0,9964	0,9674	0,8286	0,6674	0,6239	0,6180
23	0,12415E+02	0,9976	0,9781	0,8740	0,7484	0,7182	0,7143
24	0,75666E+01	1,0000	0,9977	0,9871	0,9766	0,9744	0,9740
25	0,33789E+02	0,9985	0,9873	0,9455	0,9182	0,9139	0,9134

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U235 MATNO = 7168
 REACTION = FISSION
 TEMPERATURE = 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,16700E+01	1,0002	1,0002	1,0004	1,0016	1,0033	1,0038
2	0,11129E+01	1,0000	1,0000	1,0000	1,0003	1,0004	1,0005
3	0,12218E+01	1,0005	1,0005	1,0005	1,0006	1,0008	1,0008
4	0,12679E+01	1,0000	1,0000	1,0003	1,0005	1,0004	1,0004
5	0,11954E+01	1,0000	1,0000	1,0001	1,0003	1,0006	1,0007
6	0,11297E+01	1,0000	1,0000	0,9999	0,9994	0,9989	0,9987
7	0,12782E+01	1,0000	1,0000	0,9999	0,9996	0,9993	0,9992
8	0,14453E+01	1,0000	1,0000	0,9996	0,9989	0,9977	0,9975
9	0,17256E+01	1,0001	1,0001	0,9998	0,9990	0,9983	0,9982
10	0,21141E+01	1,0000	1,0000	0,9999	0,9995	0,9989	0,9988
11	0,27566E+01	1,0000	0,9999	0,9996	0,9985	0,9974	0,9972
12	0,36879E+01	1,0000	1,0000	0,9997	0,9988	0,9982	0,9981
13	0,50121E+01	0,9999	0,9999	0,9996	0,9976	0,9967	0,9965
14	0,70014E+01	1,0001	1,0000	0,9991	0,9967	0,9955	0,9953
15	0,11002E+02	0,9996	0,9969	0,9784	0,9362	0,9199	0,9175
16	0,16999E+02	0,9995	0,9953	0,9687	0,9190	0,9028	0,9005
17	0,20537E+02	0,9994	0,9947	0,9651	0,9143	0,8987	0,8966
18	0,34383E+02	0,9944	0,9544	0,7997	0,6438	0,5994	0,5931
19	0,43114E+02	0,9882	0,9109	0,6861	0,5002	0,4511	0,4444
20	0,51206E+02	0,9721	0,8314	0,5975	0,4680	0,4393	0,4356
21	0,48037E+02	0,9713	0,8150	0,5188	0,3537	0,3184	0,3137
22	0,17148E+02	0,9972	0,9741	0,8540	0,6857	0,6327	0,6251
23	0,36918E+02	0,9969	0,9709	0,8427	0,7098	0,6815	0,6779
24	0,67505E+02	0,9997	0,9983	0,9913	0,9838	0,9820	0,9818
25	0,16034E+03	0,9992	0,9933	0,9712	0,9561	0,9537	0,9534

NUCLID = U235 MAT NUMBER = 7168

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP ** KK **		KK = I + J - 1
		J= 1	2	
1	3,36519E+00	3,56907E-02		
2	4,46055E+00	3,17197E-02		
3	4,51473E+00	2,92644E-02		
4	3,86856E+00	2,65296E-02		
5	3,95736E+00	4,31521E-02		
6	5,32037E+00	5,52713E-02		
7	6,69893E+00	7,64690E-02		
8	8,39415E+00	1,06765E-01		
9	9,98690E+00	1,12019E-01		
10	1,07401E+01	1,24514E-01		
11	1,15270E+01	1,34114E-01		
12	1,20278E+01	1,37425E-01		
13	1,22365E+01	1,37963E-01		
14	1,23319E+01	1,39752E-01		
15	1,25546E+01	1,43672E-01		
16	1,28057E+01	1,44529E-01		
17	1,29332E+01	1,46695E-01		
18	1,27615E+01	1,29245E-01		
19	1,23702E+01	1,42456E-01		
20	1,22809E+01	1,21275E-01		
21	1,13306E+01	1,31495E-01		
22	1,26313E+01	1,50281E-01		
23	1,38477E+01	1,60608E-01		
24	1,44152E+01	1,64814E-01		
25	1,48463E+01	0,0		

NUCLID = U235 MAT NUMBER = 7168

TABLE OF INELASTIC (N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	J =	1	2	3	4					
1	1,04890E-01	2,54394E-01	2,85799E-01	2,61707E-01	1,38496E-01	2,95307E-01	2,36764E-01	1,15917E-01	4,39871E-02	1,17403E-02
	2,01315E-03									
2	9,08068E-02	2,02481E-01	2,45563E-01	3,51706E-01	5,54513E-01	3,05146E-01	1,20931E-01	4,73219E-02	2,126063E-02	1,41410E-02
	0,0									
3	7,20773E-02	1,37865E-01	4,16266E-01	7,75528E-01	4,80218E-01	1,02327E-01	6,48384E-03	0,0	0,0	0,0
	0,0									
4	1,16750E-01	5,38201E-01	7,20510E-01	3,55805E-01	7,28787E-02	9,10984E-03	0,0	0,0	0,0	0,0
	0,0									
5	3,25702E-01	6,47341E-01	4,06722E-01	9,63249E-02	1,20406E-02	0,0	0,0	0,0	0,0	0,0
	0,0									
6	4,58461E-01	5,26938E-01	1,72947E-01	2,31844E-02	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
7	5,83641E-01	2,03713E-01	2,36237E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
8	3,77534E-01	1,38731E-01	7,46172E-03	2,39841E-05	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
9	2,40459E-01	7,06201E-02	2,26993E-04	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
10	1,52787E-02	8,80883E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
11	0,0	0,0	0,0	2,91552E-04	2,28511E-04	4,95638E-05	1,05615E-05	2,28511E-06	4,95638E-07	1,05615E-07
	0,0									

NUCLID = U236 MAT NO = 7169
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.65078E+00	1.51551E+00	3.42752E+00	1.40483E-02	3.58580E+00	8.35989E-01	6.99436E-01	7.85309E-01	3.69577E-02
2	7.77883E+00	8.82444E-01	3.02664E+00	3.17099E-02	4.65540E+00	2.20927E+00	0.0	7.67614E-01	3.29120E-02
3	7.95507E+00	8.77518E-01	2.78072E+00	5.20142E-02	4.78200E+00	2.24354E+00	0.0	7.20527E-01	3.05063E-02
4	6.97252E+00	7.59736E-01	2.61591E+00	1.19977E-01	3.94758E+00	2.14523E+00	0.0	5.93825E-01	2.65053E-02
5	6.85323E+00	4.47115E-01	2.50950E+00	3.07456E-01	4.27597E+00	1.82268E+00	0.0	3.84606E-01	4.69022E-02
6	7.80029E+00	3.15443E-02	2.44881E+00	2.63742E-01	6.34139E+00	1.16362E+00	0.0	3.11150E-01	6.91044E-02
7	9.72061E+00	2.62921E-03	2.39338E+00	2.55762E-01	8.96462E+00	4.97601E-01	0.0	2.05641E-01	1.04157E-01
8	1.09955E+01	2.14821E-03	2.37360E+00	3.19979E-01	1.05183E+01	1.55079E-01	0.0	1.14781E-01	1.23177E-01
9	1.18004E+01	3.00388E-03	2.36172E+00	4.68036E-01	1.13093E+01	2.00303E-02	0.0	8.08980E-01	1.22203E-01
10	1.24009E+01	4.25116E-03	2.35687E+00	6.60279E-01	1.17364E+01	0.0	0.0	7.36045E-03	1.31068E-01
11	1.28494E+01	4.83054E-03	2.35486E+00	9.04117E-01	1.19404E+01	0.0	0.0	2.84876E-03	1.33586E-01
12	1.32858E+01	6.67438E-03	2.35375E+00	1.27914E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.33554E-01
13	1.37909E+01	8.75206E-03	2.35331E+00	1.78214E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.32570E-01
14	1.47889E+01	9.71762E-03	2.35317E+00	2.77918E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.33598E-01
15	1.72663E+01	1.37677E-02	2.35308E+00	5.25251E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.33553E-01
16	2.83871E+01	1.84420E-02	2.35304E+00	1.63687E+01	1.20000E+01	0.0	0.0	2.84876E-03	1.32570E-01
17	3.08646E+01	3.51310E-02	2.35302E+00	1.88295E+01	1.20000E+01	0.0	0.0	2.84876E-03	1.33597E-01
18	3.67416E+01	1.56050E-01	2.35304E+00	2.45855E+01	1.20000E+01	0.0	0.0	2.84876E-03	1.33554E-01
19	4.40497E+01	4.56564E-01	2.35300E+00	3.15931E+01	1.20000E+01	0.0	0.0	2.84876E-03	1.32570E-01
20	1.30000E+01	5.00000E-01	2.35300E+00	5.00000E+01	1.20000E+01	0.0	0.0	2.84876E-03	1.33597E-01
21	9.88064E+02	5.00000E-01	2.35300E+00	9.75564E+02	1.20000E+01	0.0	0.0	2.84876E-03	1.33554E-01
22	1.41017E+01	5.00000E-01	2.35300E+00	1.60168E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.33597E-01
23	1.34072E+01	5.00000E-01	2.35300E+00	9.07246E-01	1.20000E+01	0.0	0.0	2.84876E-03	1.33554E-01
24	1.36904E+01	5.00000E-01	2.35300E+00	1.19038E+00	1.20000E+01	0.0	0.0	2.84876E-03	1.33554E-01
25	1.41645E+01	5.00000E-01	2.35300E+00	1.66449E+00	1.20000E+01	0.0	0.0	6.51028E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U236 MATNO = 7169
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9984	0.9960	0.9953
2	1.0000	1.0000	0.9998	0.9990	0.9977	0.9974
3	0.9995	0.9995	0.9995	0.9992	0.9988	0.9988
4	0.9998	0.9998	0.9996	0.9982	0.9965	0.9960
5	1.0000	1.0000	0.9999	0.9996	0.9992	0.9991
6	1.0000	1.0000	0.9996	0.9973	0.9946	0.9939
7	1.0000	1.0000	0.9996	0.9978	0.9959	0.9954
8	1.0000	1.0000	0.9999	0.9995	0.9990	0.9990
9	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
10	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
11	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
13	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
14	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
15	0.9999	0.9998	0.9992	0.9967	0.9949	0.9946
16	0.9999	0.9986	0.9886	0.9607	0.9479	0.9460
17	0.9994	0.9942	0.9503	0.7970	0.7071	0.6930
18	0.9991	0.9912	0.8040	0.6054	0.5689	0.5644
19	0.9983	0.9842	0.8198	0.5213	0.4743	0.4688
20	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.8245	0.2674	0.0921	0.0680	0.0631	0.0624
22	0.9993	0.9992	0.9982	0.9931	0.9891	0.9885
23	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
25	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U236 MATNO = 7169
 REACTION = ELASTIC
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0.
1	0.35858E+01	0.9999	0.9998	0.9996	0.9981	0.9960	0.9954
2	0.46554E+01	1.0000	0.9999	0.9998	0.9991	0.9982	0.9980
3	0.47820E+01	1.0000	1.0000	0.9999	0.9996	0.9996	0.9993
4	0.39476E+01	1.0000	1.0000	0.9998	0.9989	0.9974	0.9971
5	0.42760E+01	1.0000	1.0000	0.9999	0.9991	0.9981	0.9978
6	0.63414E+01	1.0000	0.9999	0.9995	0.9968	0.9941	0.9932
7	0.89646E+01	1.0000	1.0000	0.9997	0.9982	0.9972	0.9968
8	0.10518E+02	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993
9	0.11309E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
10	0.11736E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
11	0.11940E+02	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
12	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
13	0.12000E+02	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
14	0.12000E+02	1.0000	0.9999	0.9999	1.0000	1.0000	1.0000
15	0.12000E+02	1.0000	1.0002	1.0000	0.9999	0.9999	0.9999
16	0.12000E+02	1.0000	1.0000	1.0001	1.0003	1.0001	1.0001
17	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.12000E+02	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.12000E+02	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
23	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.12000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
25	0.12000E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U236 MATNO = 7169
 REACTION = CAPTURE
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0.
1	0.14048E-01	0.9999	0.9999	0.9992	0.9950	0.9891	0.9875
2	0.31710E-01	0.9999	0.9999	0.9995	0.9973	0.9944	0.9937
3	0.52014E-01	1.0004	1.0004	1.0006	1.0019	1.0034	1.0038
4	0.11998E+00	1.0000	1.0001	1.0012	1.0066	1.0128	1.0146
5	0.30746E+00	1.0000	1.0000	0.9998	0.9987	0.9973	0.9969
6	0.26374E+00	1.0001	1.0001	1.0002	1.0017	1.0034	1.0039
7	0.25576E+00	1.0000	1.0000	0.9998	0.9989	0.9982	0.9979
8	0.31998E+00	1.0000	1.0000	0.9998	0.9988	0.9978	0.9976
9	0.46804E+00	1.0000	1.0000	0.9998	0.9990	0.9982	0.9980
10	0.66028E+00	1.0000	1.0000	0.9999	0.9994	0.9989	0.9988
11	0.90412E+00	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
12	0.12791E+01	1.0000	1.0000	0.9998	0.9991	0.9986	0.9985
13	0.17821E+01	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
14	0.27792E+01	1.0000	0.9999	0.9993	0.9970	0.9954	0.9951
15	0.52525E+01	1.0000	0.9998	0.9985	0.9935	0.9902	0.9897
16	0.16369E+02	0.9999	0.9988	0.9902	0.9657	0.9540	0.9522
17	0.18830E+02	0.9995	0.9950	0.9573	0.8295	0.7538	0.7409
18	0.24586E+02	0.9948	0.9518	0.7429	0.5049	0.4427	0.4342
19	0.31593E+02	0.9938	0.9436	0.6962	0.4132	0.3407	0.3309
20	0.50000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.97556E+03	0.7326	0.3328	0.1463	0.0848	0.0704	0.0686
22	0.16017E+01	0.9999	0.9986	0.9881	0.9524	0.9312	0.9276
23	0.90725E+00	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
24	0.11904E+01	1.0000	1.0000	0.9999	0.9995	0.9992	0.9992
25	0.16645E+01	1.0000	1.0000	0.9999	0.9993	0.9990	0.9989

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U236 MATNO = 7169
 REACTION = FISSION
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.15155E+01	0.9999	0.9999	1.0000	1.0009	1.0021	1.0024
2	0.88244E+00	1.0005	1.0005	1.0006	1.0013	1.0022	1.0024
3	0.87752E+00	1.0005	1.0005	1.0005	1.0005	1.0002	1.0001
4	0.75974E+00	0.9999	0.9999	0.9997	0.9987	0.9972	0.9968
5	0.44711E+00	1.0000	1.0001	1.0006	1.0035	1.0072	1.0082
6	0.31544E-01	1.0000	1.0004	1.0040	1.0241	1.0491	1.0554
7	0.26292E-02	1.0003	1.0003	1.0006	1.0020	1.0036	1.0039
8	0.21482E-02	1.0000	1.0000	1.0001	1.0006	1.0010	1.0011
9	0.30039E-02	1.0000	1.0000	0.9997	0.9984	0.9972	0.9970
10	0.42512E-02	1.0001	1.0001	1.0000	0.9997	0.9995	0.9994
11	0.48305E-02	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
12	0.66744E-02	0.9999	0.9999	0.9997	0.9990	0.9986	0.9985
13	0.87521E-02	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
14	0.97176E-02	0.9998	0.9998	1.0000	0.9997	0.9996	0.9996
15	0.13768E-01	1.0000	0.9997	0.9990	0.9960	0.9941	0.9938
16	0.18442E-01	1.0000	0.9998	0.9983	0.9946	0.9921	0.9917
17	0.35131E-01	1.0002	1.0021	1.0172	1.0694	1.1003	1.1056
18	0.15605E+00	1.0010	1.0079	1.0463	1.1030	1.1213	1.1239
19	0.45656E+00	1.0002	1.0020	1.0108	1.0213	1.0251	1.0257
20	0.50000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.50000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.50000E+00	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
23	0.50000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.50000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
25	0.50000E+00	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999

NUCLID = U236 MAT NUMBER = 7169

TABLE OF ELASTIC MATRICES

GROUP EXIT GROUP ** KK ** KK = I + J - 1

GROUP	EXIT	GROUP	** KK **
1	J=1	2	
1	3.54884E+00	3.69578E-02	
2	4.62249E+00	3.29120E-02	
3	4.75149E+00	3.05063E-02	
4	3.92108E+00	2.65054E-02	
5	4.22907E+00	4.69021E-02	
6	6.27228E+00	6.91043E-02	
7	8.86046E+00	1.04157E-01	
8	1.03951E+01	1.23177E-01	
9	1.11871E+01	1.22203E-01	
10	1.16053E+01	1.31067E-01	
11	1.18068E+01	1.33588E-01	
12	1.18664E+01	1.33553E-01	
13	1.18674E+01	1.32570E-01	
14	1.18664E+01	1.33597E-01	
15	1.18664E+01	1.33553E-01	
16	1.18674E+01	1.32570E-01	
17	1.18664E+01	1.33597E-01	
18	1.18664E+01	1.33553E-01	
19	1.18674E+01	1.32570E-01	
20	1.18664E+01	1.33597E-01	
21	1.18664E+01	1.33553E-01	
22	1.18674E+01	1.32570E-01	
23	1.18664E+01	1.33597E-01	
24	1.18664E+01	1.33554E-01	
25	1.20000E+01	0.0	

NUCLID = U236 MAT NUMBER = 7169

TABLE OF INEL*(N,ZN) MATRICES

GROUP	J*	EXIT	GROUP	** KK **	KK = I + J = 1	5	6	7	8	9	10
1	1	11	2	3	4						
1		7,28834E-02	5,45611E-03	3,41075E-02	2,57185E-01	4,62720E-01	6,10460E-01	3,89401E-01	2,47408E-01	1,13615E-01	3,53859E-02
		6,23755E-03									
2		2,15539E-02	1,81960E-01	5,56598E-01	6,41348E-01	5,03880E-01	2,07061E-01	6,96044E-02	2,14605E-02	5,00987E-03	7,96978E-04
		0,0									
3		6,66417E-02	4,55963E-01	6,28303E-01	6,46084E-01	3,03881E-01	1,01179E-01	3,15992E-02	8,47332E-03	1,42042E-03	0,0
		0,0									
4		2,71829E-01	5,43976E-01	7,25444E-01	3,94280E-01	1,45123E-01	4,90676E-02	1,32963E-02	2,21349E-03	0,0	0,0
		0,0									
5		2,18845E-01	4,52669E-01	2,90095E-01	1,20229E-01	5,11233E-01	1,30651E-01	9,89616E-02	0,0	0,0	0,0
		0,0									
6		2,53960E-01	4,09537E-01	4,43549E-04	3,41741E-01	8,70315E-02	7,09037E-02	0,0	0,0	0,0	0,0
		0,0									
7		3,18151E-01	1,79450E-01	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
		0,0									
8		9,34852E-02	0,0	0,0	0,0	0,0	2,22581E-02	3,93560E-02	0,0	0,0	0,0
		0,0									
9		0,0	0,0	0,0	0,0	0,0	7,23593E-03	1,27943E-02	0,0	0,0	0,0
		0,0									

NUCLID = U237 MAT NO = 7170
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL	
1	6.63484E+00	1.17679E+00	3.63010E+00	7.51527E-03	3.55142E+00	8.37530E-01	1.06159E+00	8.45153E-01	2.65778E-02
2	7.75430E+00	6.93482E-01	3.11780E+00	1.44247E-02	4.55117E+00	2.45539E+00	3.98263E-02	8.17854E-01	2.68910E-02
3	7.77657E+00	6.63274E-01	2.83039E+00	2.77987E-02	4.56971E+00	2.51579E+00	0.0	7.46676E-01	2.42283E-02
4	6.43905E+00	6.81592E-01	2.65853E+00	5.89328E-02	3.47397E+00	2.22456E+00	0.0	6.14167E-01	2.43622E-02
5	6.59419E+00	7.33138E-01	2.54534E+00	1.21020E-01	3.88929E+00	1.85074E+00	0.0	3.84682E-01	4.29403E-02
6	8.11273E+00	6.93774E-01	2.47526E+00	1.36247E-01	5.85458E+00	1.42813E+00	0.0	3.11235E-01	6.18862E-02
7	9.44651E+00	6.32394E-01	2.43478E+00	1.39030E-01	7.92085E+00	7.54231E-01	0.0	2.05742E-01	9.19085E-02
8	1.03348E+01	5.75736E-01	2.41439E+00	1.91221E-01	9.43192E+00	1.35894E-01	0.0	1.14709E-01	1.10356E-01
9	1.11018E+01	5.78953E-01	2.40371E+00	2.76556E-01	1.01972E+01	4.90844E-02	0.0	8.08992E-02	1.09684E-01
10	1.16537E+01	6.40784E-01	2.39849E+00	4.07345E-01	1.05933E+01	1.22132E-02	0.0	7.34186E-03	1.18411E-01
11	1.22928E+01	7.06542E-01	2.39609E+00	5.99686E-01	1.09865E+01	6.88925E-05	0.0	2.83591E-03	1.24280E-01
12	1.30859E+01	7.80731E-01	2.39497E+00	8.81687E-01	1.14235E+01	0.0	0.0	2.83591E-03	1.28818E-01
13	1.39530E+01	8.63140E-01	2.39445E+00	1.29848E+00	1.17913E+01	0.0	0.0	2.83591E-03	1.31398E-01
14	1.49858E+01	9.52972E-01	2.39421E+00	1.91243E+00	1.21204E+01	0.0	0.0	2.83591E-03	1.35823E-01
15	1.63510E+01	1.22907E+00	2.39410E+00	2.78551E+00	1.23364E+01	0.0	0.0	2.83591E-03	1.37374E-01
16	1.83015E+01	1.82861E+00	2.39404E+00	4.03778E+00	1.24371E+01	0.0	0.0	2.83591E-03	1.37104E-01
17	2.10666E+01	2.71600E+00	2.39402E+00	5.85111E+00	1.24995E+01	0.0	0.0	2.83591E-03	1.39011E-01
18	2.50763E+01	4.03034E+00	2.39401E+00	8.46820E+00	1.25777E+01	0.0	0.0	2.83591E-03	1.39854E-01
19	3.09398E+01	5.99127E+00	2.39400E+00	1.22740E+01	1.26745E+01	0.0	0.0	2.83591E-03	1.39829E-01
20	3.96343E+01	8.90354E+00	2.39400E+00	1.77907E+01	1.27400E+01	0.0	0.0	2.83591E-03	1.41512E-01
21	5.17189E+01	1.32111E+01	2.39400E+00	2.56992E+01	1.28116E+01	0.0	0.0	2.83591E-03	1.42315E-01
22	6.42928E+01	1.41328E+01	2.39400E+00	3.72585E+01	1.29015E+01	0.0	0.0	2.83591E-03	1.42432E-01
23	6.83700E+01	1.36287E+00	2.39400E+00	5.40257E+01	1.29814E+01	0.0	0.0	2.83591E-03	1.44131E-01
24	9.17025E+01	4.90259E-01	2.39400E+00	7.81361E+01	1.30762E+01	0.0	0.0	2.83591E-03	1.45565E-01
25	1.26596E+02	3.50000E-01	2.39400E+00	1.13068E+02	1.31780E+01	0.0	0.0	6.48915E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U237 MATNO = 7170
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9997	0.9976	0.9942	0.9932
2	0.9998	0.9997	0.9996	0.9986	0.9974	0.9971
3	1.0000	1.0000	0.9998	0.9984	0.9960	0.9954
4	1.0000	1.0000	0.9999	0.9994	0.9986	0.9984
5	1.0000	1.0000	0.9998	0.9989	0.9973	0.9968
6	1.0000	0.9999	0.9994	0.9963	0.9923	0.9913
7	0.9999	0.9999	0.9998	0.9992	0.9985	0.9984
8	1.0000	1.0000	0.9999	0.9994	0.9989	0.9988
9	1.0000	1.0000	1.0000	0.9997	0.9995	0.9995
10	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
11	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
12	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
13	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993
14	1.0000	1.0000	0.9999	0.9995	0.9992	0.9991
15	1.0000	1.0000	0.9998	0.9990	0.9985	0.9984
16	0.9999	0.9999	0.9996	0.9983	0.9975	0.9974
17	1.0000	0.9999	0.9994	0.9974	0.9962	0.9961
18	0.9999	0.9998	0.9987	0.9956	0.9941	0.9939
19	0.9999	0.9997	0.9930	0.9936	0.9918	0.9915
20	1.0000	0.9996	0.9973	0.9920	0.9902	0.9899
21	0.9998	0.9992	0.9953	0.9886	0.9867	0.9865
22	1.0000	0.9997	0.9982	0.9959	0.9953	0.9952
23	0.9999	0.9993	0.9957	0.9904	0.9891	0.9889
24	0.9999	0.9988	0.9930	0.9869	0.9856	0.9855
25	0.9998	0.9982	0.9905	0.9838	0.9826	0.9825

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U237 MATNO = 7170
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.35514E+01	0.9998	0.9998	0.9995	0.9977	0.9952	0.9944
2	0.45512E+01	1.0000	1.0000	0.9998	0.9991	0.9982	0.9979
3	0.45697E+01	0.9999	0.9998	0.9996	0.9982	0.9960	0.9959
4	0.34740E+01	1.0001	1.0002	1.0001	0.9996	0.9990	0.9991
5	0.38893E+01	0.9999	0.9999	0.9997	0.9984	0.9964	0.9959
6	0.58546E+01	1.0000	0.9999	0.9994	0.9965	0.9927	0.9918
7	0.79209E+01	1.0000	1.0000	0.9998	0.9991	0.9982	0.9980
8	0.94319E+01	1.0001	1.0001	1.0000	0.9997	0.9995	0.9994
9	0.10197E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.10593E+02	1.0002	1.0002	1.0002	1.0001	1.0000	1.0000
11	0.10987E+02	1.0000	1.0000	1.0001	1.0000	0.9998	0.9998
12	0.11424E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
13	0.11791E+02	1.0000	1.0000	1.0000	0.9998	0.9998	0.9998
14	0.12120E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9999
15	0.12336E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9997
16	0.12437E+02	1.0000	1.0000	0.9999	0.9998	0.9997	0.9997
17	0.12500E+02	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
18	0.12578E+02	1.0000	1.0000	0.9998	0.9995	0.9994	0.9994
19	0.12674E+02	1.0000	1.0000	0.9998	0.9996	0.9997	0.9997
20	0.12740E+02	1.0000	1.0000	0.9999	0.9999	0.9998	0.9998
21	0.12812E+02	1.0000	0.9999	0.9999	0.9995	0.9995	0.9999
22	0.12902E+02	1.0000	0.9998	0.9999	0.9999	0.9999	0.9999
23	0.12981E+02	1.0000	0.9999	0.9999	1.0001	1.0000	1.0000
24	0.13076E+02	1.0000	0.9999	0.9993	0.9994	0.9994	0.9995
25	0.13178E+02	1.0000	0.9998	0.9995	0.9995	0.9995	0.9995

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U237 MATNO = 7170
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.75153E-02	0.9999	0.9998	0.9993	0.9961	0.9915	0.9902
2	0.14425E-01	1.0002	1.0001	0.9997	0.9972	0.9941	0.9933
3	0.27799E-01	1.0005	1.0005	1.0011	1.0046	1.0090	1.0098
4	0.58933E-01	1.0000	1.0001	1.0004	1.0027	1.0059	1.0068
5	0.12102E+00	1.0000	1.0000	0.9997	0.9975	0.9947	0.9939
6	0.13625E+00	1.0000	1.0001	1.0002	1.0005	1.0008	1.0009
7	0.13903E+00	0.9995	0.9995	0.9996	0.9990	0.9984	0.9983
8	0.19122E+00	0.9997	0.9997	0.9995	0.9988	0.9980	0.9978
9	0.27656E+00	1.0000	1.0000	0.9998	0.9990	0.9983	0.9981
10	0.40734E+00	1.0000	1.0000	0.9998	0.9992	0.9986	0.9985
11	0.59969E+00	1.0001	1.0001	0.9999	0.9990	0.9982	0.9981
12	0.84169E+00	0.9996	0.9996	0.9994	0.9989	0.9986	0.9985
13	0.12985E+01	0.9993	0.9996	0.9994	0.9988	0.9981	0.9979
14	0.19124E+01	1.0000	1.0000	0.9997	0.9988	0.9977	0.9975
15	0.27855E+01	1.0001	1.0001	0.9997	0.9982	0.9972	0.9970
16	0.40378E+01	1.0000	0.9999	0.9994	0.9977	0.9965	0.9963
17	0.58511E+01	1.0000	0.9999	0.9991	0.9970	0.9958	0.9957
18	0.84682E+01	1.0000	0.9999	0.9988	0.9960	0.9945	0.9943
19	0.12274E+02	1.0001	0.9999	0.9984	0.9952	0.9938	0.9936
20	0.17791E+02	1.0003	1.0000	0.9981	0.9940	0.9926	0.9924
21	0.25696E+02	1.0000	0.9997	0.9974	0.9932	0.9919	0.9918
22	0.37258E+02	0.9999	0.9997	1.0003	1.0006	1.0008	1.0008
23	0.54026E+02	1.0005	1.0001	0.9970	0.9931	0.9922	0.9921
24	0.78136E+02	0.9999	0.9994	0.9962	0.9922	0.9914	0.9913
25	0.11307E+03	0.9999	0.9993	0.9949	0.9912	0.9905	0.9904

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = U237 MATNO = 7170
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000.	100,	10,	1,	0,
1	0.11768E+01	0.9998	0.9998	0.9999	1.0001	1.0005	1.0006
2	0.69348E+00	1.0005	1.0006	1.0008	1.0021	1.0038	1.0043
3	0.66327E+00	1.0003	1.0003	1.0004	1.0005	1.0005	1.0005
4	0.68159E+00	1.0000	1.0000	1.0001	1.0003	1.0003	1.0004
5	0.73314E+00	0.9999	0.9998	0.9996	0.9998	0.9999	0.9998
6	0.69377E+00	0.9997	0.9998	0.9999	1.0006	1.0013	1.0016
7	0.63239E+00	0.9997	0.9997	0.9998	1.0004	1.0006	1.0007
8	0.57574E+00	1.0001	1.0002	1.0002	1.0005	1.0008	1.0009
9	0.57895E+00	0.9998	0.9998	0.9998	0.9996	0.9995	0.9995
10	0.64078E+00	0.9996	0.9996	0.9996	0.9994	0.9993	0.9993
11	0.70654E+00	1.0000	1.0000	0.9999	0.9997	0.9997	0.9995
12	0.78073E+00	0.9998	0.9998	0.9997	0.9993	0.9992	0.9991
13	0.86314E+00	1.0000	0.9999	0.9999	0.9996	0.9994	0.9993
14	0.95297E+00	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
15	0.12291E+01	0.9999	0.9999	0.9994	0.9978	0.9967	0.9965
16	0.18266E+01	1.0000	1.0000	0.9994	0.9975	0.9962	0.9960
17	0.27160E+01	1.0000	0.9999	0.9990	0.9965	0.9951	0.9949
18	0.40303E+01	1.0001	1.0000	0.9988	0.9958	0.9942	0.9939
19	0.59913E+01	1.0000	0.9998	0.9985	0.9946	0.9930	0.9927
20	0.89035E+01	0.9999	0.9996	0.9975	0.9932	0.9918	0.9916
21	0.13211E+02	1.0000	0.9995	0.9967	0.9922	0.9908	0.9906
22	0.14133E+02	1.0000	0.9996	0.9952	0.9889	0.9876	0.9873
23	0.13629E+01	1.0002	1.0018	1.0112	1.0243	1.0275	1.0280
24	0.49026E+00	1.0002	1.0015	1.0087	1.0172	1.0190	1.0192
25	0.35000E+00	1.0000	0.9999	0.9996	0.9996	0.9997	0.9997

NUCLID = U237 MAT NUMBER = 7170

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP ** KK **		KK = 1 + J - 1
	J= 1	J= 2	
1	3.52484E+00	2.65777E-02	
2	4.52428E+00	2.68910E-02	
3	4.54548E+00	2.42283E-02	
4	3.44961E+00	2.43622E-02	
5	3.84635E+00	4.29402E-02	
6	5.79269E+00	6.18862E-02	
7	7.82894E+00	9.19087E-02	
8	9.32156E+00	1.10356E-01	
9	1.00875E+01	1.09684E-01	
10	1.04749E+01	1.18411E-01	
11	1.08623E+01	1.24280E-01	
12	1.12947E+01	1.28818E-01	
13	1.16599E+01	1.31399E-01	
14	1.19845E+01	1.35822E-01	
15	1.21990E+01	1.37375E-01	
16	1.23000E+01	1.37104E-01	
17	1.23605E+01	1.39011E-01	
18	1.24379E+01	1.39854E-01	
19	1.25346E+01	1.39829E-01	
20	1.25985E+01	1.41512E-01	
21	1.26693E+01	1.42315E-01	
22	1.27591E+01	1.42432E-01	
23	1.28373E+01	1.44131E-01	
24	1.29306E+01	1.45565E-01	
25	1.31780E+01	0.0	

NUCLID = U237 MAT NUMBER = 7170

TABLE OF INEL+(N,2N) MATRICES

GROUP	EXIT	GROUP	**	KK	**	KK	=	I	+	J	=	1
1	J=	1	2	3	4	5	6	7	8	9	10	
1	5,87444E-02	4,68601E-02	3,29504E-02	2,27907E-01	5,35615E-01	9,64964E-01	6,74606E-01	2,91102E-01	9,96979E-02	2,43940E-02		
	3,86912E-03											
2	2,37218E-02	2,00468E-01	6,17930E-01	7,20994E-01	5,78612E-01	2,45493E-01	9,13412E-02	4,04282E-02	1,35148E-02	2,54000E-03		
	0,0											
3	8,36215E-02	5,10063E-01	7,01931E-01	7,21599E-01	3,39320E-01	1,12990E-01	3,52835E-02	9,45535E-03	1,58474E-03	0,0		
	0,0											
4	2,87040E-01	5,75565E-01	7,43744E-01	4,03924E-01	1,48334E-01	5,00908E-02	1,35920E-02	2,26435E-03	0,0	0,0		
	0,0											
5	2,88694E-01	6,93775E-01	4,98099E-01	2,29173E-01	1,01925E-01	3,30347E-02	6,04224E-03	0,0	0,0	0,0		
	0,0											
6	2,83276E-01	3,98351E-01	3,04560E-01	2,83403E-01	1,31411E-01	2,71305E-02	0,0	0,0	0,0	0,0		
	0,0											
7	1,51278E-01	1,89798E-01	2,08896E-01	1,30520E-01	7,37383E-02	0,0	0,0	0,0	0,0	0,0		
	0,0											
8	5,34538E-03	6,84918E-03	4,65081E-02	7,71910E-02	0,0	0,0	0,0	0,0	0,0	0,0		
	0,0											
9	4,79158E-04	1,77159E-02	3,08893E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0		
	0,0											
10	4,39679E-03	7,81642E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		
	0,0											
11	0,0	0,0	2,48874E-05	4,40051E-05	0,0	0,0	0,0	0,0	0,0	0,0		
	0,0											

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NUCLID = NP237 MAT NO = 7174
INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.68188E+00	2.14539E+00	3.57290E+00	7.01682E-03	3.28712E+00	1.03573E+00	1.98620E-01	6.42465E-01	2.44938E-02
2	7.67991E+00	1.48457E+00	3.15712E+00	1.15882E-02	4.22073E+00	1.96302E+00	0.0	8.16496E-01	2.51524E-02
3	7.97892E+00	1.61198E+00	2.90202E+00	2.41739E-02	4.42639E+00	1.90636E+00	0.0	7.39224E-01	2.79843E-02
4	7.65033E+00	1.63999E+00	2.73026E+00	5.70341E-02	4.10930E+00	1.84400E+00	0.0	6.07479E-01	2.85873E-02
5	7.52713E+00	1.40970E+00	2.61475E+00	1.34570E-01	4.18483E+00	1.79805E+00	0.0	3.87092E-01	4.31385E-02
6	8.46302E+00	7.47678E-01	2.54906E+00	3.09003E-01	5.70911E+00	1.69703E+00	0.0	3.11205E-01	6.10644E-02
7	1.02235E+01	9.72190E-02	2.53000E+00	6.27521E-01	8.06519E+00	1.41860E+00	0.0	2.05014E-01	9.53341E-02
8	1.19841E+01	3.50643E-02	2.53000E+00	1.04274E+00	9.85681E+00	1.04950E+00	0.0	1.14568E-01	1.17349E-01
9	1.30036E+01	2.33107E-02	2.53000E+00	1.59110E+00	1.05334E+01	4.55801E-01	0.0	8.08604E-02	1.19056E-01
10	1.40676E+01	1.49847E-02	2.53000E+00	2.55555E+00	1.18907E+01	2.63738E-02	0.0	7.27457E-03	1.30826E-01
11	1.53205E+01	1.11195E-02	2.53000E+00	3.25406E+00	1.26554E+01	0.0	0.0	2.83736E-03	1.35585E-01
12	1.75148E+01	2.50645E-02	2.53000E+00	6.47312E+00	1.30168E+01	0.0	0.0	2.83736E-03	1.46308E-01
13	1.99742E+01	4.37772E-02	2.53000E+00	6.15112E+00	1.37793E+01	0.0	0.0	2.83736E-03	1.55720E-01
14	2.25965E+01	1.01914E-01	2.53000E+00	7.93488E+00	1.45597E+01	0.0	0.0	2.83736E-03	1.65831E-01
15	2.78524E+01	9.38835E-02	2.53000E+00	1.24647E+01	1.52938E+01	0.0	0.0	2.83736E-03	1.73143E-01
16	3.59330E+01	1.72834E-01	2.53000E+00	1.96214E+01	1.59388E+01	0.0	0.0	2.83736E-03	1.78512E-01
17	4.78227E+01	2.79793E-01	2.53000E+00	3.10434E+01	1.64995E+01	0.0	0.0	2.83736E-03	1.85577E-01
18	6.58254E+01	3.00015E-01	2.53000E+00	4.77542E+01	1.69712E+01	0.0	0.0	2.83736E-03	1.90125E-01
19	1.05631E+02	7.36956E-01	2.52997E+00	8.31828E+01	1.97116E+01	0.0	0.0	2.83736E-03	8.81877E-02
20	1.06522E+02	2.32840E-01	2.53000E+00	9.02724E+01	1.42259E+01	0.0	0.0	2.83736E-03	9.18403E-02
21	9.85218E+01	2.43989E-02	2.53000E+00	8.65363E+01	1.21611E+01	0.0	0.0	2.83736E-03	1.24535E-01
22	6.04227E+01	1.17428E-02	2.53000E+00	4.78431E+01	1.25679E+01	0.0	0.0	2.83736E-03	1.53744E-01
23	2.28556E+02	1.46099E-02	2.53000E+00	2.14090E+02	1.44516E+01	0.0	0.0	2.83736E-03	1.54437E-01
24	3.08442E+02	1.14584E-02	2.53000E+00	2.92239E+02	1.61912E+01	0.0	0.0	2.83736E-03	1.31183E-01
25	1.22897E+02	9.59249E-03	2.53000E+00	1.07497E+02	1.51907E+01	0.0	0.0	6.68722E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = NP237 MATNO = 7174
REACTION = TOTAL
TEMPERATURE = 300. K

GROUP	SIGMA C =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9999	0.9994	0.9983	0.9980
2	0.9998	0.9998	0.9996	0.9988	0.9976	0.9973
3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.9995	0.9995	0.9995	0.9993	0.9991	0.9990
5	0.9999	0.9999	0.9999	0.9998	0.9996	0.9996
6	1.0000	1.0000	0.9997	0.9981	0.9963	0.9958
7	1.0000	0.9999	0.9993	0.9959	0.9926	0.9919
8	1.0000	1.0000	0.9998	0.9988	0.9980	0.9978
9	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995
10	1.0000	1.0000	0.9998	0.9990	0.9984	0.9983
11	0.9999	0.9997	0.9998	0.9991	0.9987	0.9986
12	1.0000	1.0000	0.9997	0.9985	0.9978	0.9976
13	1.0000	0.9999	0.9995	0.9980	0.9971	0.9970
14	0.9998	0.9997	0.9994	0.9984	0.9979	0.9978
15	1.0000	0.9997	0.9980	0.9934	0.9914	0.9910
16	0.9998	0.9994	0.9967	0.9904	0.9881	0.9878
17	0.9999	0.9993	0.9952	0.9878	0.9855	0.9852
18	0.9999	0.9989	0.9929	0.9845	0.9824	0.9821
19	0.8258	0.5449	0.5439	0.2081	0.1828	0.1787
20	0.7872	0.4069	0.2125	0.1518	0.1396	0.1380
21	0.6383	0.5024	0.2922	0.2094	0.1960	0.1943
22	0.6636	0.5627	0.3634	0.3056	0.2957	0.2944
23	0.8485	0.4751	0.2301	0.1713	0.1630	0.1620
24	0.8169	0.3262	0.1607	0.1277	0.1233	0.1227
25	0.9769	0.6362	0.6441	0.5868	0.5793	0.5785

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = NP237 MATNO = 7174
 REACTION = ELASTIC
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.32971E+01	0.9997	0.9997	0.9995	0.9989	0.9977	0.9974
2	0.42207E+01	1.0000	1.0000	0.9999	0.9991	0.9981	0.9979
3	0.44364E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
4	0.41093E+01	1.0000	1.0000	1.0000	1.0000	1.0007	1.0006
5	0.41848E+01	1.0003	1.0003	1.0002	0.9997	0.9990	0.9989
6	0.57091E+01	1.0001	1.0001	0.9997	0.9975	0.9950	0.9945
7	0.60852E+01	1.0000	1.0000	0.9995	0.9973	0.9951	0.9947
8	0.98566E+01	1.0000	0.9999	0.9998	0.9992	0.9988	0.9987
9	0.10933E+02	1.0000	1.0000	1.0002	1.0000	0.9997	0.9997
10	0.11691E+02	1.0000	1.0000	0.9999	0.9997	0.9992	0.9992
11	0.12055E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	0.13017E+02	1.0001	1.0001	1.0000	0.9998	0.9997	0.9996
13	0.13779E+02	1.0000	1.0000	0.9999	0.9995	0.9993	0.9993
14	0.14560E+02	1.0005	1.0005	1.0002	1.0001	0.9999	0.9999
15	0.15294E+02	1.0000	1.0000	0.9999	0.9994	0.9991	0.9991
16	0.15939E+02	1.0000	1.0000	0.9997	0.9993	0.9992	0.9992
17	0.16499E+02	1.0002	1.0002	0.9999	0.9995	0.9995	0.9994
18	0.16971E+02	1.0000	0.9999	0.9996	0.9995	0.9994	0.9994
19	0.19712E+02	0.9434	0.8227	0.7296	0.6732	0.6579	0.6558
20	0.24226E+02	0.9588	0.8531	0.8253	0.7986	0.7906	0.7893
21	0.12161E+02	0.9663	0.9210	0.9218	0.9090	0.9059	0.9055
22	0.12568E+02	0.9980	0.9910	0.9850	0.9838	0.9835	0.9835
23	0.14452E+02	0.9955	0.9627	0.9745	0.9726	0.9725	0.9725
24	0.16191E+02	0.9979	0.9675	0.9867	0.9521	0.9487	0.9483
25	0.15191E+02	0.9986	1.0044	1.0200	1.0293	1.0310	1.0311

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = NP237 MATNO = 7174
 REACTION = CAPTURE
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.70168E-02	0.9998	0.9998	0.9997	0.9988	0.9979	0.9977
2	0.11588E+01	1.0001	1.0001	0.9996	0.9971	0.9939	0.9931
3	0.24174E-01	1.0004	1.0004	1.0004	1.0008	1.0012	1.0013
4	0.57034E-01	1.0002	1.0003	1.0006	1.0020	1.0041	1.0047
5	0.13457E+00	1.0001	1.0001	0.9999	0.9989	0.9975	0.9972
6	0.30900E+00	1.0001	1.0000	0.9992	0.9950	0.9902	0.9891
7	0.62752E+00	1.0000	0.9999	0.9989	0.9943	0.9898	0.9888
8	0.10427E+01	1.0000	0.9999	0.9995	0.9975	0.9957	0.9954
9	0.15911E+01	1.0000	1.0000	0.9998	0.9991	0.9985	0.9983
10	0.23355E+01	1.0000	1.0000	0.9996	0.9981	0.9974	0.9972
11	0.52541E+01	1.0000	0.9999	0.9996	0.9985	0.9977	0.9975
12	0.44732E+01	1.0000	0.9999	0.9995	0.9978	0.9968	0.9970
13	0.61511E+01	1.0000	0.9999	0.9994	0.9975	0.9967	0.9964
14	0.79349E+01	1.0004	1.0004	1.0000	0.9991	0.9985	0.9985
15	0.12465E+02	1.0002	0.9998	0.9979	0.9931	0.9910	0.9907
16	0.19821E+02	1.0001	0.9997	0.9972	0.9919	0.9900	0.9897
17	0.31043E+02	1.0002	0.9997	0.9964	0.9908	0.9891	0.9889
18	0.47754E+02	1.0001	0.9994	0.9953	0.9897	0.9883	0.9880
19	0.63183E+02	0.8845	0.6138	0.3753	0.2239	0.1839	0.1785
20	0.90272E+02	0.8646	0.5067	0.2158	0.1066	0.0841	0.0811
21	0.86336E+02	0.8947	0.5965	0.3058	0.1630	0.1585	0.1553
22	0.47843E+02	0.9163	0.6157	0.3068	0.1881	0.1657	0.1628
23	0.21409E+03	0.9088	0.6138	0.3120	0.2036	0.1862	0.1841
24	0.29224E+03	0.8932	0.5237	0.2223	0.1414	0.1299	0.1285
25	0.10750E+03	0.9637	0.8890	0.7028	0.6236	0.6119	0.6105

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = NP237 MATNO = 7174
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.21434E+01	1.0001	1.0001	1.0003	1.0016	1.0031	1.0036
2	0.14846E+01	1.0003	1.0003	1.0003	1.0005	1.0007	1.0007
3	0.16120E+01	0.9998	0.9998	0.9998	0.9999	0.9999	0.9999
4	0.16400E+01	0.9997	0.9997	0.9998	0.9996	0.9994	0.9994
5	0.14097E+01	1.0001	1.0001	1.0000	1.0001	1.0001	0.9998
6	0.74788E+00	1.0001	1.0003	1.0016	1.0090	1.0175	1.0195
7	0.92219E-01	1.0001	1.0003	1.0030	1.0165	1.0302	1.0333
8	0.35064E-01	1.0001	1.0002	1.0005	1.0017	1.0033	1.0036
9	0.23311E-01	1.0000	1.0001	1.0003	1.0014	1.0021	1.0022
10	0.14985E-01	1.0000	1.0001	1.0004	1.0019	1.0029	1.0030
11	0.11119E-01	1.0002	1.0002	1.0006	1.0012	1.0016	1.0016
12	0.25065E-01	1.0002	1.0000	0.9985	0.9934	0.9898	0.9891
13	0.43777E-01	1.0001	1.0000	0.9995	0.9980	0.9972	0.9970
14	0.10191E+00	1.0000	0.9998	0.9988	0.9954	0.9937	0.9934
15	0.93883E-01	1.0000	1.0003	1.0017	1.0057	1.0074	1.0076
16	0.17283E+00	0.9999	0.9993	0.9945	0.9834	0.9794	0.9789
17	0.27979E+00	0.9998	0.9983	0.9876	0.9699	0.9620	0.9643
18	0.30002E+00	0.9994	0.9948	0.9675	0.9312	0.9225	0.9214
19	0.73696E+00	1.0010	0.9873	0.8152	0.5064	0.4155	0.4031
20	0.23284E-01	0.9996	0.9992	0.9976	0.9944	0.9927	0.9924
21	0.24399E-01	0.9991	0.9996	0.9994	0.9988	0.9986	0.9985
22	0.11743E-01	0.9984	0.9903	0.9643	0.9307	0.9200	0.9184
23	0.14610E-01	0.9841	0.9036	0.7205	0.5994	0.5746	0.5714
24	0.11458E-01	0.9432	0.7319	0.5077	0.4249	0.4113	0.4096
25	0.95925E-02	0.9872	0.9073	0.7227	0.6348	0.6217	0.6201

NUCLID = NP237 MAT NUMBER = 7174

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J = 1	2		
1	3.27263E+00	2.44938E-02		
2	4.19558E+00	2.51524E-02		
3	4.40840E+00	2.79842E-02		
4	4.08072E+00	2.85872E-02		
5	4.14169E+00	4.31384E-02		
6	5.64804E+00	6.10644E-02		
7	7.98986E+00	9.53341E-02		
8	9.73946E+00	1.17349E-01		
9	1.08143E+01	1.19056E-01		
10	1.15599E+01	1.30826E-01		
11	1.19198E+01	1.35586E-01		
12	1.28682E+01	1.48308E-01		
13	1.36236E+01	1.55720E-01		
14	1.43939E+01	1.65831E-01		
15	1.51207E+01	1.73143E-01		
16	1.57603E+01	1.78512E-01		
17	1.63139E+01	1.85587E-01		
18	1.67811E+01	1.90125E-01		
19	1.96234E+01	8.81880E-02		
20	1.41340E+01	9.18405E-02		
21	1.20366E+01	1.24535E-01		
22	1.24141E+01	1.53744E-01		
23	1.42974E+01	1.54437E-01		
24	1.60601E+01	1.31183E-01		
25	1.51907E+01	0.0		

NUCLID = NP237 MAT NUMBER = 7174

TABLE OF INELA+(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = 1 + J - 1	5	6	7	8	9	10
J=	1	2	3	4						
1	11									
1	5.40825E-03	4.31401E-02	1.30757E-01	3.70938E-01	3.46468E-01	2.53255E-01	1.51926E-01	8.18666E-02	3.67061E-02	1.07289E-02
	1.88287E-03									
2	9.82708E-03	1.44664E-01	5.03255E-01	5.72784E-01	4.55639E-01	1.90088E-01	6.29731E-02	1.87187E-02	4.39161E-03	6.81437E-04
	0.0									
3	9.37730E-02	4.54719E-01	5.55789E-01	4.81734E-01	2.16765E-01	7.44227E-02	2.26983E-02	5.57183E-03	9.04950E-04	0.0
	0.0									
4	2.16454E-01	4.67652E-01	6.32353E-01	3.44294E-01	1.26906E-01	4.28739E-02	1.15519E-02	1.91916E-03	0.0	0.0
	0.0									
5	2.48610E-01	5.92284E-01	5.08558E-01	2.34548E-01	8.70360E-02	2.30796E-02	3.81739E-03	0.0	0.0	0.0
	0.0									
6	3.32273E-01	5.18230E-01	4.52233E-01	2.18483E-01	6.45634E-02	1.12400E-02	0.0	0.0	0.0	0.0
	0.0									
7	1.77277E-01	3.14495E-01	5.14607E-01	1.79019E-01	3.32028E-02	0.0	0.0	0.0	0.0	0.0
	0.0									
8	1.90843E-01	3.88634E-01	3.90125E-01	7.99002E-02	0.0	0.0	0.0	0.0	0.0	0.0
	0.0									
9	3.73109E-03	1.66958E-01	2.85112E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0									
10	9.44994E-03	1.66863E-02	0.0	0.0	0.0	0.0	8.58261E-05	1.51755E-04	0.0	0.0
	0.0									

NUCLID = PU238 MAT NO = 7175
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.57712E+00	2.40618E+00	3.94306E+00	2.25106E-02	3.51980E+00	3.67995E-01	2.60632E-01	8.40300E-01	2.63004E-02
2	7.43357E+00	2.19752E+00	3.49088E+00	3.54565E-02	4.20922E+00	9.91373E-01	0.0	8.21006E-01	2.24982E-02
3	7.37248E+00	2.25653E+00	3.26012E+00	5.71878E-02	4.05908E+00	9.99679E-01	0.0	7.50315E-01	2.39334E-02
4	7.05945E+00	2.27569E+00	3.10392E+00	9.33623E-02	3.69100E+00	9.99400E-01	0.0	6.18656E-01	2.52980E-02
5	7.08101E+00	2.13140E+00	3.00629E+00	1.52586E-01	3.77848E+00	1.01855E+00	0.0	3.85932E-01	4.47110E-02
6	9.22502E+00	1.66465E+00	2.94606E+00	1.66153E-01	6.24443E+00	1.14978E+00	0.0	3.11392E-01	6.50719E-02
7	9.96918E+00	1.10693E+00	2.91094E+00	1.77794E-01	8.10426E+00	5.80200E-01	0.0	2.06490E-01	9.05008E-02
8	1.03749E+01	8.72479E-01	2.89216E+00	2.03845E-01	9.71007E+00	1.88480E-01	0.0	1.14260E-01	1.18721E-01
9	1.29505E+01	8.99912E-01	2.88261E+00	2.76310E-01	1.17342E+01	4.00605E-02	0.0	8.06226E-02	1.34068E-01
10	1.51790E+01	9.62338E-01	2.87820E+00	4.36606E-01	1.37801E+01	0.0	0.0	7.11188E-03	1.61805E-01
11	1.71980E+01	9.91488E-01	2.87633E+00	6.17845E-01	1.55887E+01	0.0	0.0	2.82474E-03	1.78928E-01
12	1.99896E+01	1.32171E+00	2.87541E+00	9.60628E-01	1.77073E+01	0.0	0.0	2.82474E-03	2.12633E-01
13	2.45586E+01	1.56677E+00	2.87499E+00	1.76883E+00	2.12230E+01	0.0	0.0	2.82474E-03	2.55107E-01
14	3.10870E+01	1.94367E+00	2.87478E+00	3.33337E+00	2.58100E+01	0.0	0.0	2.82474E-03	3.13756E-01
15	4.05823E+01	2.70091E+00	2.87468E+00	6.25663E+00	3.16248E+01	0.0	0.0	2.82474E-03	3.86531E-01
16	5.44142E+01	3.33156E+00	2.87464E+00	1.18623E+01	3.92203E+01	0.0	0.0	2.82474E-03	4.72877E-01
17	7.47247E+01	6.75721E+00	2.87462E+00	2.89214E+01	3.90461E+01	0.0	0.0	2.82474E-03	9.52749E-02
18	3.21131E+01	2.01880E+00	2.87461E+00	1.51336E+01	1.49607E+01	0.0	0.0	2.82474E-03	1.02792E-01
19	1.02651E+01	5.60731E-03	2.87460E+00	8.96598E-02	1.01698E+01	0.0	0.0	2.82474E-03	1.26158E-01
20	7.45284E+01	3.01432E+00	2.87460E+00	5.63940E+01	1.51201E+01	0.0	0.0	2.82474E-03	1.54004E-01
21	1.71839E+01	1.38640E+00	2.87460E+00	6.28356E+00	9.51391E+00	0.0	0.0	2.82474E-03	1.11143E-01
22	5.91710E+01	1.57455E+00	2.87460E+00	4.75744E+01	1.00220E+01	0.0	0.0	2.82474E-03	1.06591E-01
23	1.25590E+01	5.13639E-02	2.87460E+00	1.49303E+00	1.10147E+01	0.0	0.0	2.82474E-03	1.32253E-01
24	3.38477E+01	5.29719E-01	2.87460E+00	1.87277E+01	1.45903E+01	0.0	0.0	2.82474E-03	1.77287E-01
25	7.62498E+01	1.68927E+00	2.87460E+00	5.76900E+01	1.69706E+01	0.0	0.0	6.64060E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU238 MATNO = 7175
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9984	0.9961	0.9954
2	0.9998	0.9997	0.9997	0.9996	0.9995	0.9995
3	0.9996	0.9996	0.9996	0.9995	0.9994	0.9994
4	0.9998	0.9997	0.9997	0.9997	0.9995	0.9995
5	1.0000	1.0000	0.9999	0.9996	0.9992	0.9991
6	1.0000	0.9999	0.9994	0.9968	0.9938	0.9931
7	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
8	1.0000	1.0000	0.9996	0.9980	0.9966	0.9962
9	1.0000	0.9999	0.9995	0.9973	0.9956	0.9952
10	1.0000	1.0000	0.9996	0.9982	0.9972	0.9970
11	1.0000	1.0000	0.9998	0.9992	0.9988	0.9987
12	1.0000	0.9999	0.9990	0.9958	0.9939	0.9935
13	1.0000	0.9998	0.9986	0.9949	0.9929	0.9926
14	1.0000	0.9997	0.9978	0.9928	0.9906	0.9903
15	1.0000	0.9995	0.9966	0.9901	0.9878	0.9875
16	0.9999	0.9993	0.9951	0.9877	0.9857	0.9854
17	0.8732	0.4845	0.2434	0.1551	0.1324	0.1284
18	0.9138	0.6044	0.3806	0.3172	0.3045	0.3025
19	1.0000	0.9999	0.9995	0.9969	0.9943	0.9937
20	0.7881	0.3842	0.2106	0.1554	0.1462	0.1450
21	0.9694	0.8085	0.6238	0.5888	0.5838	0.5831
22	0.9217	0.5774	0.2915	0.2258	0.2136	0.2119
23	1.0000	0.9997	0.9972	0.9871	0.9795	0.9778
24	0.9997	0.9967	0.9722	0.9112	0.8857	0.8818
25	0.9992	0.9928	0.9538	0.9062	0.8954	0.8940

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU238 MATNO = 7175
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.35198E+01	0.9999	0.9999	0.9997	0.9982	0.9963	0.9958
2	0.42092E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
3	0.40591E+01	1.0000	1.0000	1.0000	0.9999	0.9997	0.9997
4	0.36910E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
5	0.37785E+01	1.0000	1.0000	0.9998	0.9985	0.9964	0.9959
6	0.62444E+01	1.0000	0.9999	0.9993	0.9967	0.9936	0.9928
7	0.81043E+01	1.0000	1.0000	1.0000	0.9998	0.9995	0.9995
8	0.97101E+01	1.0000	1.0000	0.9997	0.9986	0.9975	0.9973
9	0.11734E+02	1.0000	0.9999	0.9996	0.9985	0.9977	0.9974
10	0.13780E+02	1.0000	1.0000	0.9998	0.9991	0.9988	0.9987
11	0.15589E+02	1.0000	0.9999	0.9997	0.9996	0.9993	0.9993
12	0.17707E+02	0.9998	0.9998	0.9994	0.9980	0.9974	0.9973
13	0.21223E+02	0.9998	0.9997	0.9991	0.9977	0.9968	0.9966
14	0.25810E+02	0.9999	0.9998	0.9988	0.9966	0.9956	0.9955
15	0.31625E+02	0.9999	0.9997	0.9984	0.9959	0.9954	0.9953
16	0.39220E+02	0.9999	0.9997	0.9981	0.9956	0.9949	0.9948
17	0.39046E+02	0.9289	0.6811	0.4374	0.3172	0.2795	0.2731
18	0.14961E+02	0.9551	0.8057	0.6757	0.6276	0.6143	0.6120
19	0.10170E+02	0.9998	0.9998	0.9996	0.9980	0.9972	0.9971
20	0.15120E+02	0.9444	0.8050	0.6963	0.6439	0.6304	0.6284
21	0.95139E+01	0.9996	0.9994	1.0000	1.0023	1.0032	1.0034
22	0.10022E+02	0.9995	0.9975	0.9946	0.9950	0.9959	0.9962
23	0.11015E+02	1.0000	0.9999	0.9992	0.9968	0.9949	0.9945
24	0.14590E+02	0.9999	0.9993	0.9951	0.9839	0.9794	0.9786
25	0.16971E+02	1.0001	0.9995	0.9967	0.9936	0.9927	0.9928

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU238 MATNO = 7175
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.22511E-01	1.0000	0.9999	0.9995	0.9970	0.9932	0.9921
2	0.35457E-01	1.0000	1.0000	0.9999	0.9994	0.9989	0.9988
3	0.57188E-01	1.0000	1.0000	1.0001	1.0007	1.0015	1.0017
4	0.93362E-01	1.0000	1.0000	0.9999	1.0002	1.0012	1.0014
5	0.15259E+00	0.9998	0.9998	0.9996	0.9987	0.9980	0.9974
6	0.16615E+00	1.0000	1.0000	1.0003	1.0015	1.0029	1.0032
7	0.17779E+00	1.0000	1.0000	0.9998	0.9996	0.9993	0.9992
8	0.20385E+00	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995
9	0.27631E+00	1.0000	0.9999	0.9990	0.9954	0.9923	0.9917
10	0.43661E+00	0.9999	0.9998	0.9993	0.9975	0.9962	0.9959
11	0.61784E+00	1.0000	1.0000	0.9996	0.9984	0.9976	0.9975
12	0.96063E+00	1.0000	0.9998	0.9983	0.9932	0.9904	0.9899
13	0.17688E+01	1.0000	0.9997	0.9977	0.9917	0.9868	0.9883
14	0.33334E+01	1.0000	0.9996	0.9968	0.9898	0.9870	0.9866
15	0.62566E+01	0.9999	0.9994	0.9957	0.9881	0.9856	0.9853
16	0.11862E+02	0.9999	0.9992	0.9943	0.9864	0.9841	0.9839
17	0.28921E+02	0.9131	0.5880	0.2403	0.1064	0.0796	0.0761
18	0.15134E+02	0.9140	0.6095	0.2630	0.1114	0.0813	0.0774
19	0.89660E+01	0.9999	0.9991	0.9920	0.9588	0.9290	0.9227
20	0.56394E+02	0.8395	0.4436	0.1729	0.0770	0.0573	0.0546
21	0.62836E+01	0.9642	0.7455	0.3129	0.1356	0.1049	0.1009
22	0.47574E+02	0.9476	0.6798	0.2849	0.1328	0.1036	0.0997
23	0.14930E+01	0.9999	0.9987	0.9882	0.9464	0.9165	0.9112
24	0.18728E+02	0.9997	0.9972	0.9789	0.9328	0.9137	0.9108
25	0.57890E+02	0.9995	0.9950	0.9704	0.9390	0.9315	0.9305

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU238 MATNO = 7175
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X=SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.24062E+01	0.9999	0.9998	0.9999	0.9999	1.0001	1.0000
2	0.21975E+01	1.0005	1.0005	1.0005	1.0005	1.0005	1.0005
3	0.22565E+01	1.0000	1.0000	1.0000	0.9999	1.0000	1.0000
4	0.22757E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
5	0.21314E+01	1.0000	1.0000	1.0001	1.0007	1.0013	1.0015
6	0.16647E+01	1.0000	1.0001	1.0005	1.0026	1.0051	1.0057
7	0.11069E+01	1.0000	1.0000	1.0001	1.0005	1.0009	1.0010
8	0.87248E+00	1.0000	1.0000	1.0001	1.0003	1.0006	1.0007
9	0.89991E+00	1.0000	0.9998	0.9996	0.9994	0.9988	0.9987
10	0.96234E+00	1.0000	1.0000	0.9999	0.9999	0.9998	0.9998
11	0.99149E+00	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	0.13217E+01	1.0001	1.0000	0.9991	0.9962	0.9945	0.9942
13	0.15668E+01	0.9999	0.9998	0.9992	0.9981	0.9974	0.9973
14	0.19437E+01	0.9999	0.9997	0.9985	0.9956	0.9948	0.9946
15	0.27009E+01	0.9997	0.9994	0.9972	0.9930	0.9915	0.9913
16	0.33316E+01	1.0000	0.9999	0.9991	0.9978	0.9976	0.9976
17	0.67372E+01	0.9309	0.6348	0.2655	0.1156	0.0843	0.0798
18	0.20188E+01	0.9163	0.6150	0.2603	0.1079	0.0786	0.0748
19	0.56073E+02	0.9999	0.9994	0.9945	0.9719	0.9515	0.9472
20	0.30143E+01	0.8666	0.5181	0.2218	0.1001	0.0746	0.0711
21	0.13864E+01	0.9638	0.7421	0.3036	0.1241	0.0929	0.0889
22	0.15746E+01	0.9479	0.6614	0.2480	0.1364	0.1073	0.1034
23	0.51364E+01	0.9999	0.9990	0.9911	0.9600	0.9376	0.9335
24	0.52972E+00	0.9997	0.9971	0.9783	0.9308	0.9112	0.9083
25	0.16893E+01	0.9994	0.9949	0.9698	0.9377	0.9300	0.9291

NUCLID = PU238 MAT NUMBER = 7175

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **		KK = I + J - 1
			1	2	
1	J=				
1	3.49350E+00	2.63004E-02			
2	4.18632E+00	2.28982E-02			
3	4.03515E+00	2.39334E-02			
4	3.66570E+00	2.52980E-02			
5	3.73377E+00	4.47110E-02			
6	6.17936E+00	6.50720E-02			
7	8.01376E+00	9.05009E-02			
8	9.59135E+00	1.18722E-01			
9	1.16002E+01	1.34068E-01			
10	1.36183E+01	1.61805E-01			
11	1.54098E+01	1.78928E-01			
12	1.74946E+01	2.12633E-01			
13	2.09679E+01	2.55107E-01			
14	2.54962E+01	3.13756E-01			
15	3.12382E+01	3.86532E-01			
16	3.87475E+01	4.72876E-01			
17	3.89508E+01	9.52738E-02			
18	1.48579E+01	1.02792E-01			
19	1.00436E+01	1.26159E-01			
20	1.49661E+01	1.54004E-01			
21	9.40276E+00	1.11143E-01			
22	9.91544E+00	1.06592E-01			
23	1.08824E+01	1.32254E-01			
24	1.44131E+01	1.77287E-01			
25	1.69706E+01	0.0			

NUCLID = PU236 MAT NUMBER = 7175

TABLE OF (N,ELA+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	1	11	2	3	4						
1	1	1.31188E-02	2.53732E-03	1.79058E-02	1.15330E-01	1.58572E-01	1.69859E-01	1.06513E-01	4.62249E-02	1.79155E-02	8.99924E-02
		1.51289E-01									
2	1	9.70379E-03	5.16952E-02	2.49944E-01	2.67761E-01	2.26060E-01	9.28775E-02	3.12089E-02	9.61976E-03	2.24554E-03	3.57214E-04
		0.0									
3	1	2.96841E-02	2.03180E-01	2.79945E-01	2.87887E-01	1.35409E-01	4.50845E-02	1.40806E-02	3.77614E-03	6.33034E-04	0.0
		0.0									
4	1	1.24162E-01	2.52912E-01	3.39042E-01	1.84767E-01	6.81639E-02	2.30723E-02	6.24224E-03	1.03840E-03	0.0	0.0
		0.0									
5	1	1.39618E-01	3.85432E-01	2.95941E-01	1.33643E-01	4.89368E-02	1.28565E-02	2.11524E-03	0.0	0.0	0.0
		0.0									
6	1	1.51835E-01	3.84669E-01	2.23073E-01	2.32494E-01	9.54941E-02	6.22150E-02	0.0	0.0	0.0	0.0
		0.0									
7	1	1.02691E-01	1.96540E-01	1.44808E-01	7.33226E-02	5.95636E-02	0.0	0.0	0.0	0.0	0.0
		0.0									
8	1	1.02732E-01	0.0	0.0	0.0	0.0	3.09763E-02	5.47713E-02	0.0	0.0	0.0
		0.0									
9	1	0.0	0.0	0.0	0.0	1.44719E-02	2.55886E-02	0.0	0.0	0.0	0.0
		0.0									

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NUCLID = PU239 MAT NO = 7176
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.60584E+00	2.10700E+00	4.01938E+00	3.01992E-03	3.52237E+00	4.37514E-01	5.36136E-01	7.85434E-01	3.49149E-02
2	7.66075E+00	1.71902E+00	3.60182E+00	4.18108E-03	4.37723E+00	1.50803E+00	5.22969E-02	7.67788E-01	2.96386E-02
3	7.85641E+00	1.82074E+00	3.32551E+00	6.03028E-03	4.43686E+00	1.59278E+00	0.0	7.20648E-01	2.79689E-02
4	7.14082E+00	1.91056E+00	3.13773E+00	1.61226E-02	3.74225E+00	1.47189E+00	0.0	5.92989E-01	2.52787E-02
5	6.59320E+00	1.77827E+00	3.01334E+00	3.66509E-02	3.99215E+00	1.18413E+00	0.0	3.85514E-01	4.25963E-02
6	8.14952E+00	1.61638E+00	2.93425E+00	7.89121E-02	5.63198E+00	6.22250E-01	0.0	3.10978E-01	6.41128E-02
7	1.00403E+01	1.54214E+00	2.88972E+00	1.61218E-01	8.10858E+00	2.28343E-01	0.0	2.06200E-01	9.12435E-02
8	1.13236E+01	1.48327E+00	2.86711E+00	2.06628E-01	9.57599E+00	5.77263E-02	0.0	1.14532E-01	1.12747E-01
9	1.27606E+01	1.53208E+00	2.85542E+00	2.53878E-01	1.09719E+01	2.73527E-03	0.0	8.07219E-02	1.20670E-01
10	1.40768E+01	1.63976E+00	2.84931E+00	4.57132E-01	1.19799E+01	0.0	0.0	7.24543E-03	1.35458E-01
11	1.53324E+01	1.80292E+00	2.84697E+00	7.85005E-01	1.27445E+01	0.0	0.0	2.81294E-03	1.42875E-01
12	1.82399E+01	2.26446E+00	2.84521E+00	1.68908E+00	1.42863E+01	0.0	0.0	2.81294E-03	1.67908E-01
13	2.22192E+01	3.22963E+00	2.84461E+00	3.08320E+00	1.59064E+01	0.0	0.0	2.81294E-03	1.79092E-01
14	2.63517E+01	4.60550E+00	2.84434E+00	5.10018E+00	1.66460E+01	0.0	0.0	2.81294E-03	1.84664E-01
15	3.01939E+01	7.29242E+00	2.84421E+00	6.40133E+00	1.45002E+01	0.0	0.0	2.81294E-03	1.25529E-01
16	4.52620E+01	1.33476E+01	2.84415E+00	1.46203E+01	1.72942E+01	0.0	0.0	2.81294E-03	1.64823E-01
17	5.35325E+01	1.90084E+01	2.84412E+00	1.65870E+01	1.79371E+01	0.0	0.0	2.81294E-03	1.16957E-01
18	1.18725E+02	5.71191E+01	2.84411E+00	3.74184E+01	2.41875E+01	0.0	0.0	2.81294E-03	1.08167E-01
19	7.30768E+01	2.27629E+01	2.84410E+00	3.51892E+01	1.51247E+01	0.0	0.0	2.81294E-03	9.07111E-02
20	1.91630E+02	1.05403E+02	2.84410E+00	7.16981E+01	1.45291E+01	0.0	0.0	2.81294E-03	8.97276E-02
21	7.24983E+01	3.34577E+01	2.84410E+00	2.89574E+01	1.00832E+01	0.0	0.0	2.81294E-03	1.07854E-01
22	2.26100E+01	1.11166E+01	2.84410E+00	1.07359E+00	1.04198E+01	0.0	0.0	2.81294E-03	1.18662E-01
23	4.37732E+01	2.49280E+01	2.84410E+00	7.69100E+00	1.11542E+01	0.0	0.0	2.81294E-03	1.2+961E-01
24	1.60353E+02	1.01715E+02	2.84410E+00	4.60490E+01	1.25887E+01	0.0	0.0	2.81294E-03	1.61577E-01
25	2.74679E+03	1.63384E+03	2.84410E+00	1.09933E+03	1.36197E+01	0.0	0.0	4.55211E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU239 MATNO = 7176
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA G =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9999	0.9995	0.9988	0.9985
2	1.0000	1.0000	0.9999	0.9994	0.9984	0.9981
3	0.9996	0.9996	0.9995	0.9994	0.9992	0.9992
4	1.0000	1.0000	0.9999	0.9993	0.9984	0.9982
5	1.0000	1.0000	1.0000	0.9997	0.9994	0.9993
6	1.0000	0.9999	0.9994	0.9966	0.9932	0.9923
7	1.0000	1.0000	0.9998	0.9988	0.9978	0.9976
8	1.0000	1.0000	0.9998	0.9989	0.9981	0.9979
9	1.0000	1.0000	0.9998	0.9988	0.9981	0.9979
10	1.0000	1.0000	0.9998	0.9993	0.9988	0.9987
11	1.0000	1.0000	0.9999	0.9995	0.9992	0.9991
12	1.0000	0.9998	0.9986	0.9937	0.9906	0.9900
13	1.0000	0.9999	0.9992	0.9969	0.9957	0.9955
14	1.0000	0.9999	0.9991	0.9966	0.9955	0.9953
15	0.9999	0.9990	0.9916	0.9742	0.9676	0.9667
16	0.9980	0.9186	0.7631	0.6329	0.5747	0.5649
17	0.9777	0.8029	0.5337	0.3971	0.3659	0.3615
18	0.9380	0.6562	0.3815	0.2704	0.2489	0.2462
19	0.9319	0.5821	0.3018	0.2219	0.2054	0.2032
20	0.9187	0.5497	0.2392	0.1510	0.1359	0.1340
21	0.9206	0.5685	0.3440	0.2951	0.2878	0.2869
22	0.9999	0.9994	0.9951	0.9810	0.9741	0.9730
23	0.9996	0.9963	0.9737	0.9307	0.9172	0.9154
24	0.9911	0.9199	0.7428	0.6294	0.6156	0.6140
25	0.8817	0.5538	0.3796	0.3540	0.3513	0.3510

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = Pu239 MATNO = 7176
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.35224E+01	0.9999	0.9999	0.9997	0.9991	0.9983	0.9980
2	0.43772E+01	0.9999	0.9999	0.9999	0.9994	0.9989	0.9988
3	0.44369E+01	1.0000	1.0000	0.9998	1.0004	1.0001	1.0001
4	0.37422E+01	1.0002	1.0001	1.0001	0.9996	0.9990	0.9988
5	0.39921E+01	1.0002	1.0002	1.0001	0.9997	0.9993	0.9988
6	0.58320E+01	1.0001	1.0000	0.9994	0.9962	0.9926	0.9917
7	0.81086E+01	0.9999	0.9999	0.9998	0.9987	0.9981	0.9980
8	0.95760E+01	1.0001	1.0001	1.0000	0.9995	0.9990	0.9989
9	0.10972E+02	0.9998	0.9998	0.9997	0.9990	0.9987	0.9986
10	0.11980E+02	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997
11	0.12744E+02	1.0000	1.0000	1.0000	0.9998	0.9999	0.9999
12	0.14286E+02	1.0000	0.9999	0.9999	0.9978	0.9970	0.9969
13	0.15906E+02	0.9998	0.9998	0.9998	0.9990	0.9988	0.9987
14	0.16646E+02	0.9998	0.9998	0.9997	0.9996	0.9995	0.9995
15	0.14500E+02	1.0000	0.9994	0.9950	0.9848	0.9809	0.9805
16	0.17294E+02	0.9918	0.9917	0.8254	0.7540	0.7338	0.7306
17	0.17937E+02	0.9802	0.8814	0.7265	0.6534	0.6371	0.6348
18	0.24187E+02	0.9587	0.7879	0.5932	0.5251	0.5128	0.5112
19	0.15125E+02	0.9757	0.8699	0.7414	0.6929	0.6818	0.6802
20	0.14529E+02	0.9812	0.9014	0.8054	0.7728	0.7675	0.7669
21	0.13083E+02	0.9941	0.9689	0.9404	0.9320	0.9310	0.9309
22	0.10420E+02	0.9999	0.9999	0.9994	0.9979	0.9970	0.9969
23	0.11154E+02	1.0000	0.9999	0.9993	0.9980	0.9976	0.9975
24	0.12589E+02	0.9995	0.9956	0.9832	0.9745	0.9731	0.9729
25	0.15620E+02	1.0062	1.0549	1.0596	1.0641	1.0646	1.0647

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = Pu239 MATNO = 7176
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.30199E-02	1.0000	0.9999	0.9997	0.9982	0.9962	0.9956
2	0.41811E-02	1.0002	1.0002	1.0001	0.9994	0.9985	0.9983
3	0.60303E-02	1.0004	1.0004	1.0007	1.0020	1.0038	1.0040
4	0.14123E-01	1.0013	1.0013	1.0017	1.0040	1.0068	1.0076
5	0.38651E-01	1.0000	0.9999	0.9997	0.9979	0.9961	0.9954
6	0.74912E-01	0.9999	0.9996	0.9982	0.9897	0.9798	0.9777
7	0.14122E+00	1.0000	0.9999	0.9996	0.9980	0.9962	0.9958
8	0.20663E+00	1.0001	1.0001	1.0000	0.9995	0.9990	0.9989
9	0.23388E+00	1.0002	1.0001	0.9998	0.9982	0.9969	0.9966
10	0.45713E+00	1.0000	0.9999	0.9993	0.9969	0.9949	0.9945
11	0.75501E+00	1.0002	1.0002	0.9998	0.9984	0.9973	0.9972
12	0.16891E+01	1.0000	0.9997	0.9972	0.9880	0.9824	0.9816
13	0.30832E+01	1.0000	0.9999	0.9987	0.9950	0.9932	0.9929
14	0.51002E+01	1.0000	0.9996	0.9985	0.9948	0.9930	0.9928
15	0.84013E+01	1.0000	0.9995	0.9963	0.9881	0.9847	0.9842
16	0.14620E+02	0.9918	0.9369	0.7770	0.6356	0.5884	0.5811
17	0.16587E+02	0.9741	0.8262	0.5059	0.3024	0.2586	0.2528
18	0.37418E+02	0.9387	0.6725	0.3280	0.1955	0.1723	0.1694
19	0.35189E+02	0.9404	0.6624	0.2861	0.1379	0.1088	0.1049
20	0.71698E+02	0.9373	0.6583	0.2984	0.1630	0.1389	0.1359
21	0.29957E+02	0.9320	0.6439	0.3040	0.1832	0.1627	0.1596
22	0.1736E+01	0.9999	0.9996	0.9916	0.9706	0.9607	0.9592
23	0.76910E+01	0.9997	0.9960	0.9701	0.9207	0.9047	0.9025
24	0.46049E+02	0.9930	0.9442	0.7883	0.7139	0.7002	0.6986
25	0.10993E+02	0.9340	0.7490	0.5211	0.5975	0.5949	0.5947

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU239 MATNO = 7176
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.21070E+01	0.9999	0.9999	1.0000	1.0003	1.0008	1.0009
2	0.17190E+01	1.0000	1.0000	1.0000	1.0004	1.0007	1.0008
3	0.18207E+01	1.0004	1.0004	1.0004	1.0006	1.0008	1.0008
4	0.19106E+01	0.9996	0.9996	0.9994	0.9999	1.0002	1.0006
5	0.17783E+01	1.0000	1.0000	0.9999	1.0003	1.0007	1.0007
6	0.16164E+01	1.0000	1.0000	1.0002	1.0004	1.0011	1.0012
7	0.15421E+01	1.0000	1.0000	1.0001	1.0005	1.0007	1.0005
8	0.14833E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9998
9	0.15321E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.16398E+01	0.9999	0.9999	0.9999	0.9996	0.9994	0.9993
11	0.18029E+01	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995
12	0.22645E+01	0.9999	0.9998	0.9988	0.9958	0.9935	0.9931
13	0.32296E+01	1.0000	0.9999	0.9994	0.9970	0.9956	0.9954
14	0.46055E+01	1.0002	1.0001	0.9992	0.9967	0.9955	0.9953
15	0.72924E+01	1.0001	0.9994	0.9959	0.9870	0.9833	0.9828
16	0.13348E+02	0.9961	0.9704	0.8919	0.8093	0.7770	0.7718
17	0.19008E+02	0.9877	0.9134	0.7064	0.5254	0.4750	0.4678
18	0.57119E+02	0.9718	0.6378	0.5935	0.4345	0.3980	0.3931
19	0.22763E+02	0.9557	0.7342	0.5913	0.2352	0.2010	0.1963
20	0.10540E+03	0.9495	0.7175	0.3844	0.2317	0.2013	0.1974
21	0.33458E+02	0.9385	0.6799	0.3835	0.2870	0.2717	0.2698
22	0.11117E+02	0.9999	0.9994	0.9954	0.9837	0.9775	0.9767
23	0.24928E+02	0.9997	0.9974	0.9829	0.9554	0.9463	0.9450
24	0.10172E+03	0.9941	0.9519	0.8243	0.7490	0.7366	0.7351
25	0.16338E+04	0.9377	0.7636	0.6435	0.6213	0.6189	0.6186

NUCLID = PU239 MAT NUMBER = 7176

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP ** KK **		KK = I + J - 1
	J= 1	2	
1	3.48746E+00	3.49150E-02	
2	4.34759E+00	2.96387E-02	
3	4.40889E+00	2.79689E-02	
4	3.71697E+00	2.52788E-02	
5	3.94955E+00	4.25962E-02	
6	5.76787E+00	6.41128E-02	
7	8.01733E+00	9.12434E-02	
8	9.46324E+00	1.12747E-01	
9	1.08512E+01	1.20670E-01	
10	1.18444E+01	1.35459E-01	
11	1.26016E+01	1.42676E-01	
12	1.41184E+01	1.67909E-01	
13	1.57273E+01	1.79092E-01	
14	1.84614E+01	1.84664E-01	
15	1.93747E+01	1.25529E-01	
16	1.71294E+01	1.64823E-01	
17	1.78202E+01	1.16957E-01	
18	2.40793E+01	1.08167E-01	
19	1.50340E+01	9.07112E-02	
20	1.44394E+01	8.97280E-02	
21	9.97532E+00	1.07854E-01	
22	1.03011E+01	1.18662E-01	
23	1.10292E+01	1.24961E-01	
24	1.24271E+01	1.61577E-01	
25	1.36197E+01	0.0	

NUCLID = PU239 MAT NUMBER = 7176

TABLE OF INELA*(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = 1 + J →	5	6	7	8	9	10
1	1	1	2	3	4					
	11	11	12							
1	1.3158E-02	1.9275E-01	1.1752E-01	1.9388E-01	2.3262E-01	4.3092E-01	2.1446E-01	7.6079E-02	2.7789E-02	6.1716E-03
	1.9872E-03	4.3948E-04								
2	7.2658E-02	3.0437E-01	4.9005E-01	3.4103E-01	2.0310E-01	7.9489E-02	2.7192E-02	8.7813E-03	2.0950E-03	4.4867E-04
	3.4905E-02	3.8609E-03								
3	2.3405E-01	4.9964E-01	4.2282E-01	2.8626E-01	1.0484E-01	3.2435E-02	9.7937E-03	2.2705E-03	5.0465E-04	1.1031E-04
	2.3926E-05	1.6294E-06								
4	3.0417E-01	3.3746E-01	4.2418E-01	2.5522E-01	1.0499E-01	5.4900E-02	8.4617E-03	1.9432E-03	4.3117E-04	9.3521E-05
	1.9242E-05	0.0								
5	4.0574E-01	3.3881E-01	2.1534E-01	1.2316E-01	6.9151E-02	2.3731E-02	6.2663E-03	1.4866E-03	3.2268E-04	6.8803E-05
	1.1067E-05	0.0								
6	3.3893E-01	1.7384E-01	5.7584E-02	4.2267E-02	1.9158E-02	6.7728E-03	2.1152E-03	4.5717E-04	9.7417E-05	2.1077E-05
	1.6380E-06	0.0								
7	1.5254E-01	6.8157E-02	5.5649E-03	1.3519E-03	3.4194E-04	2.7318E-04	8.7702E-05	1.8762E-05	4.0298E-06	7.7444E-07
	0.0	0.0								
8	2.7050E-02	2.6516E-02	3.7801E-03	2.9728E-04	6.4272E-05	1.3933E-05	3.0464E-06	6.5387E-07	1.2357E-07	0.0
	0.0	0.0								
9	0.0	1.3315E-03	1.0672E-03	2.3326E-04	5.0882E-05	1.2361E-05	3.0717E-05	7.3007E-06	1.5650E-06	3.4351E-07
	3.9518E-08	0.0								

NUCLID = PU240 MAT NO = 7177
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.39536E+00	2.09599E+00	4.01102E+00	1.70411E-02	3.37750E+00	4.76686E-01	4.28179E-01	7.85371E-01	3.35404E-02
2	6.99707E+00	1.55539E+00	3.56155E+00	2.65924E-02	3.95604E+00	1.45904E+00	0.0	7.68225E-01	2.58643E-02
3	6.87027E+00	1.65767E+00	3.27888E+00	4.28908E-02	3.67020E+00	1.49952E+00	0.0	7.21144E-01	2.29509E-02
4	6.67525E+00	1.65784E+00	3.09136E+00	7.18579E-02	3.39922E+00	1.54633E+00	0.0	5.88895E-01	2.51556E-02
5	7.35857E+00	1.47064E+00	2.95244E+00	1.23838E-01	4.06120E+00	1.70289E+00	0.0	3.85726E-01	4.18326E-02
6	7.73972E+00	6.25002E-01	2.87040E+00	1.36163E-01	5.43781E+00	1.54075E+00	0.0	3.10957E-01	6.11632E-02
7	9.42675E+00	1.28178E-01	2.81421E+00	1.36666E-01	8.21056E+00	9.51351E-01	0.0	2.05581E-01	9.29344E-02
8	1.06168E+01	6.33040E-02	2.78707E+00	1.77797E-01	9.99905E+00	3.76620E-01	0.0	1.14353E-01	1.18852E-01
9	1.12920E+01	6.61878E-02	2.76937E+00	3.11636E-01	1.08661E+01	4.80726E-02	0.0	8.09109E-02	1.13422E-01
10	1.15750E+01	8.63103E-02	2.76361E+00	5.38852E-01	1.09498E+01	0.0	0.0	7.35522E-03	1.19219E-01
11	1.18839E+01	9.56544E-02	2.76178E+00	7.99555E-01	1.09887E+01	0.0	0.0	2.80124E-03	1.20425E-01
12	1.24436E+01	1.22490E-01	2.76094E+00	1.07341E+00	1.12477E+01	0.0	0.0	2.80124E-03	1.25236E-01
13	1.67715E+01	1.69339E-01	2.76035E+00	1.63991E+00	1.49622E+01	0.0	0.0	2.80124E-03	1.16754E-01
14	2.22935E+01	1.69598E-01	2.76009E+00	2.64642E+00	1.94775E+01	0.0	0.0	2.80124E-03	3.17650E-01
15	2.51642E+01	2.64579E-01	2.75993E+00	4.59041E+00	2.03092E+01	0.0	0.0	2.80124E-03	1.26338E-01
16	3.20233E+01	7.17301E-02	2.75986E+00	7.21538E+00	2.47362E+01	0.0	0.0	2.80124E-03	1.19256E-01
17	5.71505E+01	1.82064E-01	2.75982E+00	2.05341E+01	3.64343E+01	0.0	0.0	2.80124E-03	9.72519E-02
18	1.12170E+02	3.53667E-01	2.75981E+00	3.76002E+01	7.42156E+01	0.0	0.0	2.80124E-03	1.57942E-01
19	1.34954E+02	4.70149E-01	2.75981E+00	6.47341E+01	6.97500E+01	0.0	0.0	2.80124E-03	1.38424E-01
20	4.67446E+01	2.82919E-01	2.75980E+00	3.20766E+01	1.43851E+01	0.0	0.0	2.80124E-03	1.35728E-01
21	1.46113E+01	6.61534E-04	2.75980E+00	8.77865E-01	1.37328E+01	0.0	0.0	2.80124E-03	1.70290E-01
22	2.92796E+01	2.38809E-03	2.75980E+00	9.33549E+00	1.99417E+01	0.0	0.0	2.80124E-03	3.10305E-01
23	1.02454E+04	1.79841E+00	2.75980E+00	9.41466E+03	8.28988E+02	0.0	0.0	2.80124E-03	1.87791E+01
24	1.35998E+03	2.49142E-01	2.75980E+00	1.30013E+03	5.96003E+01	0.0	0.0	2.80124E-03	1.13220E-02
25	1.65538E+02	3.19228E-02	2.75980E+00	1.63704E+02	1.80249E+00	0.0	0.0	7.76069E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU240 MATNO = 7177
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9998	0.9990	0.9972	0.9966	
2	0.9997	0.9997	0.9997	0.9996	0.9994	0.9993	
3	1.0000	1.0000	1.0000	0.9999	0.9996	0.9995	
4	0.9997	0.9997	0.9997	0.9996	0.9995	0.9995	
5	1.0000	1.0000	0.9999	0.9993	0.9986	0.9984	
6	1.0000	1.0000	0.9998	0.9987	0.9974	0.9971	
7	1.0000	1.0000	0.9998	0.9986	0.9974	0.9971	
8	1.0000	1.0000	0.9998	0.9990	0.9982	0.9980	
9	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	
10	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	
11	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	
12	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993	
13	0.9999	0.9692	0.8413	0.7272	0.6723	0.6567	
14	0.9999	0.8968	0.6570	0.5125	0.4421	0.4145	
15	0.9920	0.8319	0.5608	0.4362	0.3766	0.3531	
16	0.9335	0.6710	0.4335	0.3436	0.2975	0.2800	
17	0.8603	0.4927	0.2868	0.2376	0.2218	0.2187	
18	0.6365	0.2532	0.1421	0.1084	0.0935	0.0902	
19	0.5937	0.1886	0.1025	0.0803	0.0724	0.0708	
20	0.9141	0.4950	0.2999	0.2690	0.2641	0.2634	
21	1.0000	0.9998	0.9981	0.9910	0.9859	0.9850	
22	0.9994	0.9940	0.9539	0.8593	0.8269	0.8224	
23	0.0988	0.0317	0.0150	0.0116	0.0112	0.0111	
24	0.6248	0.3400	0.2469	0.2309	0.2291	0.2289	
25	0.9974	0.9954	0.9882	0.9839	0.9832	0.9831	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU240 MATNO = 7177

REACTION = ELASTIC

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.33775E+01	0.9998	0.9998	0.9996	0.9986	0.9969	0.9965
2	0.39560E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
3	0.36702E+01	1.0000	1.0000	1.0000	0.9997	0.9995	0.9994
4	0.33992E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
5	0.40612E+01	1.0000	1.0000	0.9999	0.9992	0.9981	0.9980
6	0.54378E+01	1.0001	1.0001	0.9997	0.9976	0.9952	0.9946
7	0.82106E+01	1.0000	1.0000	0.9998	0.9987	0.9975	0.9974
8	0.99990E+01	1.0000	1.0000	0.9998	0.9991	0.9984	0.9983
9	0.10866E+02	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
10	0.10950E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
11	0.10989E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.11248E+02	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
13	0.14962E+02	0.9974	0.9777	0.8933	0.7951	0.7571	0.7496
14	0.19478E+02	0.9913	0.9330	0.7574	0.6124	0.5611	0.5495
15	0.20309E+02	0.9842	0.8922	0.6867	0.5548	0.5100	0.4995
16	0.24736E+02	0.9484	0.7598	0.5496	0.4542	0.4201	0.4116
17	0.36434E+02	0.9088	0.6611	0.4518	0.3763	0.3563	0.3529
18	0.74216E+02	0.7647	0.4036	0.2273	0.1726	0.1554	0.1521
19	0.69750E+02	0.7626	0.3775	0.2036	0.1554	0.1422	0.1398
20	0.14385E+02	0.9710	0.8749	0.7912	0.7639	0.7574	0.7565
21	0.13733E+02	1.0001	1.0000	0.9994	0.9970	0.9950	0.9947
22	0.19942E+02	0.9999	0.9982	0.9860	0.9576	0.9465	0.9449
23	0.82899E+03	0.2812	0.1180	0.0713	0.0607	0.0592	0.0591
24	0.59600E+02	0.6683	0.3105	0.1729	0.1497	0.1472	0.1469
25	0.18025E+01	1.0003	1.0028	1.0122	1.0182	1.0191	1.0193

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU240 MATNO = 7177

REACTION = CAPTURE

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.17041E-01	1.0000	0.9999	0.9996	0.9976	0.9946	0.9938
2	0.26592E-01	0.9999	0.9999	0.9998	0.9994	0.9988	0.9987
3	0.42891E-01	0.9999	1.0000	1.0001	1.0010	1.0021	1.0025
4	0.71858E-01	0.9997	0.9997	1.0006	0.9994	0.9982	0.9979
5	0.12384E+00	1.0000	1.0000	0.9998	0.9989	0.9975	0.9972
6	0.13616E+00	1.0000	1.0000	1.0002	1.0012	1.0024	1.0027
7	0.13667E+00	1.0000	1.0000	0.9998	0.9986	0.9976	0.9974
8	0.17780E+00	1.0000	1.0000	0.9997	0.9988	0.9978	0.9976
9	0.31164E+00	1.0000	1.0000	0.9999	0.9993	0.9988	0.9987
10	0.53885E+00	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
11	0.79955E+00	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995
12	0.10734E+01	1.0000	1.0000	0.9998	0.9989	0.9980	0.9978
13	0.16399E+01	0.9976	0.9788	0.8841	0.7450	0.6931	0.6846
14	0.26464E+01	0.9913	0.9286	0.6920	0.4529	0.3850	0.3751
15	0.45904E+01	0.9839	0.8778	0.5531	0.2944	0.2325	0.2242
16	0.72154E+01	0.9548	0.7509	0.3779	0.1662	0.1245	0.1199
17	0.20534E+02	0.8969	0.5652	0.2075	0.0864	0.0675	0.0654
18	0.37600E+02	0.7671	0.3560	0.1157	0.0503	0.0400	0.0388
19	0.64734E+02	0.7244	0.2770	0.0793	0.0337	0.0260	0.0250
20	0.32077E+02	0.8827	0.4955	0.1616	0.0653	0.0489	0.0468
21	0.87787E+00	0.9999	0.9993	0.9938	0.9719	0.9561	0.9531
22	0.93355E+01	0.9991	0.9918	0.9390	0.8250	0.7813	0.7750
23	0.94147E+04	0.2306	0.0680	0.0282	0.0201	0.0191	0.0190
24	0.13001E+04	0.7615	0.4798	0.3531	0.3294	0.3266	0.3263
25	0.16370E+03	0.9999	0.9988	0.9949	0.9926	0.9922	0.9923

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU240 MATNO = 7177
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.20960E+01	0.9999	0.9999	1.0000	1.0009	1.0022	1.0026
2	0.15534E+01	1.0002	1.0002	1.0002	1.0003	1.0004	1.0005
3	0.16577E+01	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
4	0.16578E+01	1.0006	1.0006	1.0007	1.0007	1.0008	1.0007
5	0.14706E+01	1.0000	1.0000	1.0001	1.0006	1.0014	1.0016
6	0.62500E+00	1.0000	1.0001	1.0012	1.0072	1.0145	1.0163
7	0.12818E+00	1.0000	1.0001	1.0010	1.0053	1.0101	1.0113
8	0.63304E-01	1.0000	1.0000	1.0004	1.0024	1.0042	1.0046
9	0.66188E-01	1.0002	1.0002	1.0001	0.9997	0.9994	0.9994
10	0.86310E-01	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
11	0.95654E-01	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
12	0.12249E+00	1.0000	1.0000	0.9997	0.9983	0.9971	0.9969
13	0.16934E+00	0.9957	0.9627	0.8283	0.6950	0.6546	0.6482
14	0.16960E+00	0.9947	0.9557	0.7895	0.5908	0.5246	0.5137
15	0.26458E+00	0.9797	0.8567	0.5614	0.3649	0.3221	0.3183
16	0.71730E-01	0.9628	0.7922	0.4708	0.2835	0.2429	0.2370
17	0.18206E+00	0.9014	0.5761	0.2133	0.0887	0.0693	0.0670
18	0.35367E+00	0.7750	0.3640	0.1173	0.0504	0.0398	0.0385
19	0.47015E+00	0.7336	0.2853	0.0812	0.0335	0.0252	0.0241
20	0.28272E+00	0.8822	0.4933	0.1583	0.0616	0.0451	0.0431
21	0.66153E-03	0.9998	0.9996	0.9982	0.9924	0.9881	0.9873
22	0.23881E-02	0.9993	0.9937	0.9532	0.8656	0.8320	0.8271
23	0.17984E+01	0.2311	0.0684	0.0285	0.0205	0.0195	0.0194
24	0.24914E+00	0.7624	0.4817	0.3532	0.3315	0.3288	0.3285
25	0.31923E-01	0.9999	0.9989	0.9952	0.9929	0.9927	0.9926

NUCLID = PU240 MAT NUMBER = 7177

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **		KK = I + J - 1
			1	2	
1	3.34396E+00	3.35404E-02			
2	3.93018E+00	2.58643E-02			
3	3.64725E+00	2.29509E-02			
4	3.37406E+00	2.51557E-02			
5	4.01937E+00	4.18326E-02			
6	5.37664E+00	6.11631E-02			
7	8.11763E+00	9.29343E-02			
8	9.88070E+00	1.18852E-01			
9	1.07527E+01	1.13422E-01			
10	1.08306E+01	1.19219E-01			
11	1.08682E+01	1.20425E-01			
12	1.11225E+01	1.25236E-01			
13	1.48455E+01	1.16753E-01			
14	1.91599E+01	3.17650E-01			
15	2.01829E+01	1.26339E-01			
16	2.46170E+01	1.19257E-01			
17	3.63371E+01	9.72520E-02			
18	7.40577E+01	1.57942E-01			
19	6.96116E+01	1.38424E-01			
20	1.42494E+01	1.35727E-01			
21	1.35625E+01	1.70290E-01			
22	1.96314E+01	3.10306E-01			
23	8.10208E+02	1.87791E+01			
24	5.95890E+01	1.13235E-02			
25	1.80249E+00	0.0			

NUCLID = PU240 MAT NUMBER = 7177
 TABLE OF INELA+(N,2N) MATRICES

GROUP	EXIT	GROUP	**	KK	**	KK	**	1	2	3	4	5	6	7	8	9	10
J=	1	11	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	3,29717E-02	3,17251E-03	1,98321E-02	1,19007E-01	1,58672E-01	3,08524E-01	3,70738E-01	2,07179E-01	8,52906E-02	2,36673E-02							
	3,99147E-03																
2	1,41895E-02	1,20107E-01	3,67474E-01	4,23604E-01	3,32839E-01	1,36800E-01	4,60033E-02	1,41874E-02	3,31222E-03	5,26929E-04							
	0,0																
3	4,45262E-02	3,04770E-01	4,19918E-01	4,31830E-01	2,03113E-01	6,76268E-02	2,11209E-02	5,66421E-03	9,49551E-04	0,0							
	0,0																
4	1,88189E-01	3,90512E-01	5,26295E-01	2,87600E-01	1,06347E-01	3,60367E-02	9,73423E-03	1,61807E-03	0,0								
	0,0																
5	1,98166E-01	4,31366E-01	2,81880E-01	1,17999E-01	4,65105E-01	1,18849E-01	8,95247E-02	0,0	0,0								
	0,0																
6	6,96967E-01	2,93480E-01	2,67640E-03	3,74624E-01	9,54062E-02	7,75969E-02	0,0	0,0	0,0								
	0,0																
7	5,82512E-01	3,68838E-01	0,0	0,0	0,0	0,0	0,0	0,0	0,0								
	0,0																
8	2,27378E-01	0,0	0,0	0,0	0,0	5,39139E-02	9,53287E-02	0,0	0,0								
	0,0																
9	0,0	0,0	0,0	0,0	0,0	1,73662E-02	3,07064E-02	0,0	0,0								
	0,0																

NUCLID = PU241 MAT NO = 7178
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.68660E+00	1.90841E+00	4.12485E+00	9.41989E-03	3.56148E+00	2.07440E-01	9.99845E-01	7.85443E-01	3.47492E-02
2	7.36103E+00	1.40264E+00	3.70380E+00	1.86177E-02	4.32208E+00	1.43895E+00	1.78744E-01	7.67734E-01	2.94982E-02
3	7.71119E+00	1.52279E+00	3.40173E+00	3.51317E-02	4.44922E+00	1.70405E+00	0.0	7.20496E-01	2.81783E-02
4	7.60926E+00	1.65663E+00	3.19721E+00	6.94373E-02	4.06727E+00	1.81591E+00	0.0	5.90412E-01	2.85736E-02
5	7.77562E+00	1.57381E+00	3.06565E+00	1.03980E-01	4.35179E+00	1.74605E+00	0.0	3.86845E-01	4.49853E-02
6	8.84390E+00	1.49674E+00	2.97977E+00	1.97693E-01	3.79187E+00	1.35759E+00	0.0	3.11630E-01	5.99757E-02
7	1.06897E+01	1.71650E+00	2.93125E+00	3.82262E-01	7.86586E+00	7.25108E-01	0.0	2.05754E-01	8.89056E-02
8	1.19715E+01	1.98859E+00	2.90833E+00	5.09953E-01	9.25981E+00	2.13163E-01	0.0	1.14630E-01	1.06872E-01
9	1.27634E+01	2.24450E+00	2.89644E+00	6.10283E-01	9.86852E+00	4.00605E-02	0.0	8.08840E-02	1.02907E-01
10	1.34678E+01	2.80208E+00	2.89022E+00	7.15770E-01	9.95000E+00	0.0	0.0	7.35341E-03	1.07611E-01
11	1.44531E+01	3.72222E+00	2.88738E+00	7.80833E-01	9.95000E+00	0.0	0.0	2.78870E-03	1.08445E-01
12	1.57242E+01	4.90926E+00	2.88597E+00	8.64256E-01	9.95072E+00	0.0	0.0	2.78870E-03	1.08453E-01
13	1.69457E+01	5.99012E+00	2.88543E+00	1.38378E+00	9.97177E+00	0.0	0.0	2.78870E-03	1.07993E-01
14	1.77619E+01	5.90711E+00	2.88522E+00	1.86116E+00	9.99362E+00	0.0	0.0	2.78870E-03	1.08988E-01
15	1.93296E+01	6.79485E+00	2.88511E+00	2.53475E+00	1.00000E+01	0.0	0.0	2.78870E-03	1.08953E-01
16	4.01779E+01	2.15717E+01	2.88503E+00	8.60622E+00	1.00000E+01	0.0	0.0	2.78870E-03	1.08151E-01
17	6.01861E+01	3.58508E+01	2.88502E+00	1.43353E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08989E-01
18	6.64621E+01	4.03985E+01	2.88501E+00	1.60636E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08953E-01
19	9.68177E+01	6.20127E+01	2.88501E+00	2.48051E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08151E-01
20	2.15633E+02	1.46892E+02	2.88500E+00	5.87406E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08989E-01
21	3.32661E+02	2.31000E+02	2.88500E+00	9.16605E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08953E-01
22	1.56880E+02	1.04887E+02	2.88500E+00	4.19935E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08150E-01
23	5.55760E+01	3.25548E+01	2.88500E+00	1.50211E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08989E-01
24	7.39280E+01	4.57571E+01	2.88500E+00	1.81710E+01	1.00000E+01	0.0	0.0	2.78870E-03	1.08953E-01
25	1.27788E+03	9.05626E+02	2.88500E+00	3.62250E+02	1.00000E+01	0.0	0.0	6.37351E-03	0.0

TABLE OF EFFECTIVE CROSS SECTIONS

NUCLIDE = PU241 MATNO = 7178
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	6.68265E+00	6.68262E+00	6.68173E+00	6.67624E+00	6.66413E+00	6.66062E+00
2	7.35740E+00	7.35736E+00	7.35656E+00	7.35461E+00	7.35155E+00	7.35074E+00
3	7.70976E+00	7.70977E+00	7.70974E+00	7.70963E+00	7.70951E+00	7.70947E+00
4	7.60984E+00	7.60972E+00	7.60971E+00	7.60966E+00	7.60960E+00	7.60959E+00
5	7.76740E+00	7.76740E+00	7.76722E+00	7.76629E+00	7.76516E+00	7.76488E+00
6	8.82972E+00	8.82946E+00	8.82699E+00	8.81392E+00	8.79970E+00	8.79637E+00
7	1.06469E+01	1.06463E+01	1.06426E+01	1.06246E+01	1.06073E+01	1.06036E+01
8	1.19564E+01	1.19562E+01	1.19548E+01	1.19483E+01	1.19427E+01	1.19415E+01
9	1.27586E+01	1.27587E+01	1.27565E+01	1.27568E+01	1.27555E+01	1.27552E+01
10	1.34581E+01	1.34580E+01	1.34570E+01	1.34529E+01	1.34497E+01	1.34491E+01
11	1.44252E+01	1.44250E+01	1.44251E+01	1.44154E+01	1.44097E+01	1.44086E+01
12	1.56654E+01	1.56650E+01	1.56636E+01	1.56580E+01	1.56541E+01	1.56534E+01
13	1.66387E+01	1.66384E+01	1.66374E+01	1.66335E+01	1.66310E+01	1.66306E+01
14	1.75367E+01	1.75367E+01	1.75359E+01	1.75331E+01	1.75314E+01	1.75311E+01
15	1.90775E+01	1.90767E+01	1.90701E+01	1.90476E+01	1.90345E+01	1.90323E+01
16	2.83787E+01	2.83317E+01	2.79831E+01	2.71700E+01	2.68865E+01	2.68112E+01
17	5.02936E+01	5.02185E+01	4.97275E+01	4.89124E+01	4.86813E+01	4.86508E+01
18	6.63160E+01	6.63015E+01	6.62195E+01	6.60689E+01	6.60259E+01	6.60205E+01
19	9.60366E+01	9.56906E+01	9.38243E+01	9.11369E+01	9.05720E+01	9.05021E+01
20	2.09038E+02	1.96633E+02	1.52498E+02	1.30438E+02	1.27093E+02	1.26699E+02
21	3.15803E+02	3.10123E+02	2.90549E+02	2.82477E+02	2.81471E+02	2.81356E+02
22	1.38142E+02	1.16503E+02	6.03695E+01	7.22501E+01	7.12008E+01	7.10791E+01
23	5.55370E+01	5.55367E+01	5.55363E+01	5.55358E+01	5.55353E+01	5.55353E+01
24	7.25389E+01	7.21693E+01	7.02192E+01	6.78833E+01	6.74250E+01	6.73690E+01
25	1.14541E+03	6.75558E+02	3.44489E+02	2.89439E+02	2.83428E+02	2.82753E+02

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU241 MATNO = 7178
REACTION = ELASTIC

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.35615E+01	0.9998	0.9998	0.9997	0.9988	0.9975	0.9972
2	0.43221E+01	0.9999	1.0000	0.9999	0.9996	0.9992	0.9990
3	0.44492E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.40673E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
5	0.43518E+01	1.0000	1.0000	0.9999	0.9995	0.9992	0.9990
6	0.57919E+01	1.0000	0.9999	0.9996	0.9979	0.9963	0.9958
7	0.78659E+01	1.0000	1.0000	0.9997	0.9984	0.9970	0.9968
8	0.92598E+01	1.0000	1.0000	0.9999	0.9995	0.9992	0.9991
9	0.96685E+01	1.0000	1.0000	1.0000	0.9997	0.9999	0.9999
10	0.99500E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.99500E+01	1.0000	1.0000	0.9999	0.9999	1.0000	1.0000
12	0.99507E+01	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999
13	0.99718E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.99936E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.10000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16	0.10000E+02	1.0000	1.0000	1.0001	1.0000	1.0000	1.0000
17	0.10000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.10000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.10000E+02	1.0001	1.0000	1.0000	1.0001	1.0001	1.0001
20	0.10000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.10000E+02	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.10000E+02	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
23	0.10000E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.10000E+02	0.9999	1.0000	0.9999	1.0000	1.0000	1.0000
25	0.10000E+02	1.0000	1.0000	1.0001	1.0000	1.0000	1.0001

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU241 MATNO = 7178
REACTION = CAPTURE

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.94199E-02	0.9999	0.9999	0.9998	0.9993	0.9986	0.9984
2	0.18618E-01	1.0000	1.0000	0.9996	0.9973	0.9945	0.9937
3	0.35132E-01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
4	0.89437E-01	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
5	0.10398E+00	1.0000	1.0000	0.9998	0.9987	0.9974	0.9970
6	0.19769E+00	1.0000	0.9999	0.9993	0.9959	0.9928	0.9918
7	0.38226E+00	1.0000	0.9999	0.9994	0.9966	0.9940	0.9935
8	0.50995E+00	1.0000	1.0000	0.9999	0.9993	0.9987	0.9986
9	0.61028E+00	1.0000	1.0000	0.9999	0.9996	0.9994	0.9993
10	0.71577E+00	0.9999	0.9999	0.9997	0.9996	0.9993	0.9992
11	0.78083E+00	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
12	0.86426E+00	1.0000	1.0000	0.9999	0.9994	0.9991	0.9991
13	0.13838E+01	1.0000	1.0000	0.9996	0.9981	0.9972	0.9970
14	0.18612E+01	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
15	0.25348E+01	1.0000	0.9998	0.9987	0.9950	0.9930	0.9926
16	0.86062E+01	0.9998	0.9978	0.9834	0.9510	0.9393	0.9372
17	0.14335E+02	1.0000	0.9997	0.9982	0.9961	0.9954	0.9954
18	0.16064E+02	1.0000	0.9997	0.9985	0.9965	0.9962	0.9961
19	0.24805E+02	0.9998	0.9971	0.9830	0.9674	0.9640	0.9635
20	0.58741E+02	0.9941	0.9525	0.8300	0.7595	0.7480	0.7467
21	0.91661E+02	0.9964	0.9739	0.9300	0.9149	0.9130	0.9128
22	0.41993E+02	0.9764	0.8435	0.6204	0.5399	0.5283	0.5270
23	0.13021E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.18171E+02	0.9995	0.9948	0.9726	0.9487	0.9438	0.9431
25	0.36225E+03	0.9498	0.7381	0.5068	0.4471	0.4399	0.4391

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU241 MATNO = 7178
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.19084E+01	0.9999	0.9999	1.0000	1.0005	1.0013	1.0015
2	0.14026E+01	1.0000	1.0000	1.0001	1.0003	1.0005	1.0006
3	0.15228E+01	1.0000	1.0000	1.0000	1.0000	0.9998	0.9998
4	0.16566E+01	1.0004	1.0004	1.0004	1.0004	1.0004	1.0004
5	0.15738E+01	1.0000	1.0000	1.0000	1.0003	1.0005	1.0006
6	0.14967E+01	1.0000	1.0000	1.0000	0.9997	0.9993	0.9992
7	0.17165E+01	1.0000	1.0000	0.9998	0.9986	0.9977	0.9975
8	0.19886E+01	1.0000	1.0000	0.9999	0.9995	0.9991	0.9990
9	0.22445E+01	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995
10	0.28021E+01	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
11	0.37222E+01	1.0000	1.0000	0.9997	0.9986	0.9977	0.9976
12	0.49093E+01	0.9999	0.9999	0.9998	0.9992	0.9988	0.9988
13	0.55901E+01	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
14	0.59071E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
15	0.67949E+01	1.0000	0.9999	0.9991	0.9964	0.9951	0.9948
16	0.21572E+02	0.9998	0.9978	0.9835	0.9513	0.9396	0.9375
17	0.35851E+02	1.0000	0.9997	0.9982	0.9961	0.9955	0.9954
18	0.40398E+02	1.0000	0.9977	0.9982	0.9967	0.9962	0.9962
19	0.62013E+02	0.9998	0.9971	0.9830	0.9674	0.9640	0.9635
20	0.14689E+03	0.9941	0.9925	0.8297	0.7591	0.7477	0.7463
21	0.23100E+03	0.9963	0.9733	0.9264	0.9130	0.9110	0.9107
22	0.10489E+03	0.9763	0.8433	0.6198	0.5391	0.5275	0.5262
23	0.32555E+02	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
24	0.45757E+02	0.9995	0.9951	0.9733	0.9499	0.9451	0.9445
25	0.90563E+03	0.9498	0.7381	0.5068	0.4471	0.4399	0.4391

NUCLID = PU241 MAT NUMBER = 7178

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.52673E+00	3.47492E-02		
2	4.29258E+00	2.94982E-02		
3	4.42105E+00	2.81783E-02		
4	4.03870E+00	2.85736E-02		
5	4.30680E+00	4.49853E-02		
6	5.73190E+00	5.99757E-02		
7	7.77695E+00	8.89056E-02		
8	9.15294E+00	1.06873E-01		
9	9.76561E+00	1.02907E-01		
10	9.84239E+00	1.07611E-01		
11	9.84155E+00	1.08445E-01		
12	9.84227E+00	1.08453E-01		
13	9.86377E+00	1.07993E-01		
14	9.88463E+00	1.08988E-01		
15	9.89105E+00	1.08953E-01		
16	9.89185E+00	1.08151E-01		
17	9.89101E+00	1.08989E-01		
18	9.89105E+00	1.08953E-01		
19	9.89185E+00	1.08151E-01		
20	9.89101E+00	1.08989E-01		
21	9.89105E+00	1.08953E-01		
22	9.89185E+00	1.08151E-01		
23	9.89101E+00	1.08989E-01		
24	9.89105E+00	1.08953E-01		
25	1.00000E+01	0.0		

NUCLID = PU241 MAT NUMBER = 7178

TABLE OF INELA+(N,ZN) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	1	11	1	1.0158E-02	4.35474E-02	9.84009E-02	2.95973E-01	6.51190E-01	3.11383E-01	1.14118E-01	3.99058E-02	1.04020E-02
			2	1.70147E-03								
2	1	11	2	1.34870E-02	1.17755E-01	3.61141E-01	4.18249E-01	3.50791E-01	1.56480E-01	5.53571E-02	1.75759E-02	1.12814E-01
			3	0.0								
3	1	11	3	5.04806E-02	3.46477E-01	4.77025E-01	4.90783E-01	2.30884E-01	7.68636E-02	2.40090E-02	6.44383E-03	1.06054E-03
			4	0.0								
4	1	11	4	2.25883E-01	4.59600E-01	6.15919E-01	3.35601E-01	1.23792E-01	4.18985E-02	1.13368E-02	1.88596E-03	0.0
			5	0.0								
5	1	11	5	2.43841E-01	6.61703E-01	5.04503E-01	2.27230E-01	8.31985E-02	2.18691E-02	3.60273E-03	0.0	0.0
			6	0.0								
6	1	11	6	2.09748E-01	5.83650E-01	3.56000E-01	1.49729E-01	4.12822E-02	6.97666E-03	0.0	0.0	0.0
			7	0.0								
7	1	11	7	1.72396E-01	2.72540E-01	1.30737E-01	7.64768E-02	7.29376E-02	0.0	0.0	0.0	0.0
			8	0.0								
8	1	11	8	1.16565E-02	6.72940E-03	7.15344E-02	1.23242E-01	0.0	0.0	0.0	0.0	0.0
			9	0.0								
9	1	11	9	1.95704E-04	1.44382E-02	2.54266E-02	0.0	0.0	0.0	0.0	0.0	0.0
			10	0.0								

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NUCLID = PU242 MAT NO = 7180
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.54712E+00	1.88136E+00	4.07286E+00	6.86696E-03	3.45867E+00	4.49449E+01	7.50777E-01	8.65481E-01	2.18948E-02
2	7.14590E+00	1.28337E+00	3.56843E+00	1.49504E-02	4.00180E+00	1.84382E+00	1.96209E-03	8.25661E-01	2.20442E-02
3	6.95435E+00	1.34507E+00	3.27939E+00	3.51728E-02	3.65322E+00	1.92089E+00	0.0	7.35525E-01	2.21090E-02
4	6.83307E+00	1.40836E+00	3.68796E+00	6.18426E-02	3.39619E+00	1.96667E+00	0.0	6.49858E-01	1.82133E-02
5	7.84272E+00	1.34638E+00	2.96412E+00	1.22096E-01	4.28156E+00	2.09268E+00	0.0	5.75375E-01	4.02365E-02
6	8.61925E+00	3.97984E-01	2.89283E+00	1.33521E-01	6.32308E+00	1.76466E+00	0.0	3.46833E-01	6.39799E-02
7	9.35454E+00	6.55995E-02	2.64147E+00	1.37751E-01	8.52967E+00	6.21527E-01	0.0	2.34190E-01	9.08167E-02
8	1.11068E+01	2.23889E-02	2.81655E+00	1.66644E-01	1.07793E+01	1.38490E-01	0.0	1.40438E-01	1.31959E-01
9	1.33287E+01	1.32314E-02	2.80407E+00	2.53007E-01	1.30393E+01	2.30885E-02	0.0	5.94759E-02	1.46630E-01
10	1.52341E+01	1.10279E-02	2.79806E+00	4.28713E-01	1.47943E+01	7.91922E-05	0.0	2.18703E-02	1.66234E-01
11	1.60913E+01	9.38114E-03	2.79457E+00	6.17950E-01	1.54639E+01	0.0	0.0	6.49050E-03	1.48042E-01
12	1.21351E+01	6.13649E-03	2.79319E+00	8.51034E-01	1.12780E+01	0.0	0.0	2.77789E-03	1.16507E-01
13	1.20054E+01	4.91314E-03	2.79260E+00	1.26335E+00	1.07371E+01	0.0	0.0	2.77789E-03	1.15694E-01
14	2.38255E+01	4.41110E-03	2.79228E+00	2.42680E+00	2.13943E+01	0.0	0.0	2.77789E-03	4.46097E-01
15	4.38990E+01	1.43304E-02	2.79209E+00	4.47156E+00	3.94131E+01	0.0	0.0	2.77789E-03	2.24566E-01
16	4.51882E+01	1.20908E-02	2.79206E+00	6.62194E+00	3.85542E+01	0.0	0.0	2.77789E-03	3.13445E-01
17	4.82779E+01	4.15749E-02	2.79202E+00	1.41010E+01	3.41354E+01	0.0	0.0	2.77789E-03	2.17813E-01
18	1.31580E+02	1.53856E-01	2.79201E+00	3.71706E+01	9.42556E+01	0.0	0.0	2.77789E-03	1.74282E-01
19	2.58947E+01	7.30141E-02	2.79200E+00	6.54777E+00	1.92739E+01	0.0	0.0	2.77789E-03	2.04930E-01
20	2.30666E+01	7.84825E-03	2.79200E+00	2.49377E+00	2.05650E+01	0.0	0.0	2.77789E-03	2.30748E-01
21	2.38475E+01	2.13697E-02	2.79200E+00	1.38657E+00	2.24395E+01	0.0	0.0	2.77789E-03	2.68132E-01
22	1.81834E+03	4.39135E+01	2.79200E+00	1.58379E+03	1.90632E+02	0.0	0.0	2.77789E-03	1.24714E-01
23	3.16033E+01	4.57922E-01	2.79200E+00	1.65697E+01	1.45757E+01	0.0	0.0	2.77789E-03	1.60658E-01
24	2.34431E+01	1.22635E-01	2.79200E+00	9.38840E+00	1.39320E+01	0.0	0.0	2.77789E-03	1.23075E-01
25	1.80821E+01	2.55436E-04	2.79200E+00	6.74181E+00	1.13400E+01	0.0	0.0	6.34892E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU242 MATNO = 7180
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9983	0.9959	0.9951
2	0.9997	0.9997	0.9996	0.9996	0.9995	0.9995
3	0.9994	0.9994	0.9994	0.9992	0.9990	0.9990
4	1.0000	1.0000	1.0000	0.9998	0.9995	0.9995
5	1.0000	1.0000	0.9998	0.9986	0.9970	0.9966
6	1.0000	1.0000	0.9998	0.9991	0.9983	0.9981
7	1.0000	1.0000	0.9999	0.9997	0.9994	0.9993
8	1.0000	0.9999	0.9991	0.9954	0.9921	0.9914
9	1.0000	1.0000	0.9997	0.9983	0.9973	0.9970
10	1.0000	1.0000	0.9997	0.9987	0.9980	0.9978
11	0.9991	0.9991	0.9988	0.9977	0.9969	0.9967
12	0.9980	0.9979	0.9971	0.9938	0.9912	0.9908
13	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
14	0.9991	0.9913	0.9318	0.7889	0.7349	0.7272
15	0.9871	0.8896	0.7494	0.6360	0.6011	0.5961
16	0.9189	0.7052	0.5528	0.4988	0.4856	0.4836
17	0.9824	0.7372	0.5342	0.4928	0.4861	0.4852
18	0.5540	0.2865	0.2017	0.1747	0.1676	0.1665
19	0.9998	0.9733	0.8631	0.8033	0.7931	0.7918
20	1.0000	0.9733	0.8642	0.9430	0.9392	0.9387
21	1.0000	0.9999	0.9992	0.9966	0.9954	0.9952
22	0.2241	0.0850	0.0360	0.0244	0.0228	0.0226
23	0.9993	0.9958	0.9621	0.9060	0.8895	0.8872
24	0.9999	0.9991	0.9925	0.9697	0.9570	0.9550
25	0.9999	0.9999	0.9998	0.9995	0.9993	0.9992

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU242 MATNO = 7180
 REACTION = ELASTIC
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X=SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.34587E+01	0.9999	0.9998	0.9996	0.9982	0.9960	0.9954
2	0.40018E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998
3	0.36532E+01	1.0000	1.0000	0.9999	0.9997	0.9994	0.9993
4	0.33962E+01	1.0000	1.0000	1.0000	1.0001	0.9995	0.9995
5	0.42816E+01	1.0005	1.0004	1.0001	0.9984	0.9967	0.9963
6	0.63231E+01	1.0000	1.0000	0.9997	0.9986	0.9970	0.9969
7	0.85297E+01	1.0000	1.0000	0.9999	0.9995	0.9989	0.9988
8	0.10779E+02	1.0000	0.9999	0.9995	0.9971	0.9950	0.9952
9	0.13039E+02	1.0000	1.0000	0.9997	0.9992	0.9984	0.9983
10	0.14794E+02	0.9998	0.9998	0.9995	0.9992	0.9991	0.9990
11	0.15464E+02	1.0000	1.0000	0.9998	0.9992	0.9987	0.9986
12	0.11278E+02	1.0000	0.9999	0.9995	0.9974	0.9959	0.9956
13	0.10737E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.21394E+02	0.9993	0.9946	0.9577	0.8574	0.8111	0.8039
15	0.39413E+02	0.9898	0.9354	0.8316	0.7527	0.7286	0.7252
16	0.38554E+02	0.9478	0.8478	0.6455	0.5916	0.5800	0.5784
17	0.34135E+02	0.9710	0.8479	0.7043	0.6555	0.6469	0.6457
18	0.94256E+02	0.7079	0.3984	0.2817	0.2476	0.2401	0.2390
19	0.19274E+02	1.0000	0.9993	0.9966	0.9935	0.9922	0.9920
20	0.20565E+02	1.0000	1.0000	0.9998	0.9993	0.9991	0.9991
21	0.22440E+02	1.0000	0.9999	0.9993	0.9987	0.9985	0.9984
22	0.19063E+03	0.4768	0.2510	0.1774	0.1594	0.1566	0.1563
23	0.14576E+02	1.0001	1.0007	1.0050	1.0129	1.0156	1.0159
24	0.13932E+02	1.0000	0.9998	0.9976	0.9909	0.9870	0.9864
25	0.11340E+02	1.0000	1.0000	0.9999	0.9995	0.9997	0.9998

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU242 MATNO = 7180
 REACTION = CAPTURE
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X=SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.68670E-02	1.0000	0.9999	0.9995	0.9967	0.9926	0.9914
2	0.14950E-01	1.0000	1.0000	0.9999	0.9991	0.9981	0.9978
3	0.35173E-01	1.0005	1.0005	1.0007	1.0016	1.0027	1.0031
4	0.61843E-01	1.0000	1.0000	0.9995	0.9977	0.9952	0.9949
5	0.12210E+00	1.0006	1.0005	1.0001	0.9976	0.9951	0.9945
6	0.13352E+00	1.0000	1.0001	1.0002	1.0001	1.0003	1.0003
7	0.13775E+00	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
8	0.16664E+00	1.0000	1.0002	0.9995	0.9960	0.9930	0.9923
9	0.25301E+00	1.0000	0.9999	0.9993	0.9963	0.9940	0.9935
10	0.42871E+00	1.0001	1.0001	0.9996	0.9977	0.9964	0.9963
11	0.61795E+00	1.0000	1.0000	1.0003	1.0014	1.0021	1.0022
12	0.65103E+00	1.0001	1.0002	1.0005	1.0025	1.0040	1.0043
13	0.12634E+01	1.0001	1.0000	0.9999	0.9995	0.9990	0.9989
14	0.24268E+01	0.9997	0.9977	0.9822	0.9391	0.9189	0.9157
15	0.44716E+01	0.9809	0.8715	0.6274	0.4530	0.4090	0.4030
16	0.66219E+01	0.9544	0.7654	0.4337	0.2486	0.2137	0.2094
17	0.14101E+02	0.9390	0.6612	0.2861	0.1519	0.1305	0.1279
18	0.37171E+02	0.6931	0.3338	0.1391	0.0769	0.0667	0.0655
19	0.65478E+01	0.9889	0.9062	0.6041	0.3653	0.3158	0.3096
20	0.24938E+01	0.9958	0.9615	0.7894	0.6039	0.5614	0.5560
21	0.13866E+01	0.9998	0.9996	0.9980	0.9931	0.9909	0.9905
22	0.15838E+04	0.4007	0.1431	0.0568	0.0326	0.0287	0.0282
23	0.16570E+02	0.9993	0.9938	0.9567	0.8861	0.8627	0.8594
24	0.93884E+01	0.9999	0.9992	0.9934	0.9748	0.9646	0.9630
25	0.67418E+01	1.0000	1.0000	0.9998	0.9994	0.9991	0.9990

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU242 MATNO = 7180

REACTION = FISSION

TEMPERATURE= 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.18814E+01	0.9998	0.9998	1.0000	1.0006	1.0014	1.0017
2	0.12834E+01	1.0001	1.0001	1.0001	1.0003	1.0006	1.0006
3	0.13451E+01	1.0004	1.0004	1.0005	1.0005	1.0008	1.0008
4	0.14084E+01	0.9999	0.9999	0.9999	0.9999	0.9998	0.9998
5	0.13464E+01	1.0000	1.0000	1.0002	1.0016	1.0031	1.0035
6	0.39798E+00	1.0000	1.0001	1.0013	1.0077	1.0150	1.0167
7	0.65599E-01	1.0000	1.0001	1.0005	1.0027	1.0052	1.0058
8	0.22389E-01	1.0000	1.0002	1.0021	1.0111	1.0197	1.0214
9	0.13231E-01	1.0000	1.0001	1.0004	1.0017	1.0026	1.0027
10	0.11028E-01	1.0002	1.0003	1.0005	1.0007	1.0011	1.0012
11	0.93811E-02	1.0001	1.0000	0.9996	0.9984	0.9975	0.9974
12	0.61365E-02	1.0000	1.0000	0.9994	0.9969	0.9949	0.9946
13	0.49131E-02	1.0000	1.0000	1.0002	1.0003	1.0004	1.0004
14	0.44111E-02	1.0000	1.0000	1.0015	1.0057	1.0077	1.0080
15	0.14330E-01	0.9739	0.8301	0.5899	0.5033	0.4914	0.4900
16	0.12091E-01	0.9984	0.9824	0.8852	0.7782	0.7525	0.7489
17	0.41575E-01	0.9460	0.6955	0.3388	0.2081	0.1879	0.1854
18	0.15386E+00	0.6244	0.2315	0.0952	0.0644	0.0599	0.0593
19	0.73014E-01	0.9962	0.9676	0.8525	0.7473	0.7213	0.7178
20	0.78483E-02	0.9999	0.9999	0.9991	0.9966	0.9954	0.9951
21	0.21370E-01	1.0000	0.9992	0.9930	0.9749	0.9663	0.9650
22	0.43913E+02	0.4007	0.1431	0.0568	0.0325	0.0286	0.0282
23	0.45792E+00	0.9994	0.9939	0.9565	0.8855	0.8619	0.8587
24	0.12264E+00	0.9998	0.9982	0.9850	0.9414	0.9171	0.9131
25	0.25544E-03	1.0000	1.0000	0.9997	0.9988	0.9982	0.9981

NUCLID = PU242 MAT NUMBER = 7180

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP		** KK **	KK = 1 + J - 1
	J=	2		
1	3.43678E+00	2.18948E-02		
2	3.97975E+00	2.20442E-02		
3	3.63111E+00	2.21090E-02		
4	3.37798E+00	1.82133E-02		
5	4.24132E+00	4.02365E-02		
6	6.25910E+00	6.39800E-02		
7	8.43885E+00	9.08167E-02		
8	1.06473E+01	1.31960E-01		
9	1.28927E+01	1.46630E-01		
10	1.46281E+01	1.66235E-01		
11	1.53159E+01	1.48042E-01		
12	1.11615E+01	1.16507E-01		
13	1.06215E+01	1.15695E-01		
14	2.09482E+01	4.46097E-01		
15	3.91885E+01	2.24566E-01		
16	3.82407E+01	3.13445E-01		
17	3.39176E+01	2.17814E-01		
18	9.40813E+01	1.74284E-01		
19	1.90650E+01	2.08931E-01		
20	2.03343E+01	2.30748E-01		
21	2.21714E+01	2.68132E-01		
22	1.90507E+02	1.24721E-01		
23	1.44150E+01	1.60659E-01		
24	1.38090E+01	1.23075E-01		
25	1.13400E+01	0.0		

NUCLID = PU242 MAT NUMBER = 7180

TABLE OF INELA*(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	J=	1	2	3	4						
		11	12	13							
1		3,61260E-04	2,33591E-03	3,27710E-02	1,34184E-01	2,89979E-01	5,32310E-01	4,17847E-01	3,26039E-01	1,58067E-01	4,85466E-02
		8,56243E-03	0,0	0,0							
2		1,37110E-02	1,43944E-01	4,60020E-01	5,54344E-01	4,21079E-01	1,73238E-01	5,64592E-02	1,64339E-02	3,93469E-03	6,51664E-04
		0,0	1,41761E-03	2,50657E-03							
3		6,09897E-02	3,99313E-01	5,78515E-01	5,28974E-01	2,39140E-01	8,18729E-02	2,51025E-02	6,03311E-03	9,48044E-04	0,0
		0,0	0,0	0,0							
4		2,60913E-01	5,55414E-01	6,16325E-01	3,54877E-01	1,25364E-01	4,07726E-02	1,11636E-02	1,84201E-03	0,0	0,0
		0,0	0,0	0,0							
5		2,59978E-01	8,01849E-01	6,17346E-01	2,81918E-01	1,01395E-01	2,61002E-02	4,28055E-03	0,0	0,0	0,0
		0,0	0,0	0,0							
6		2,86271E-01	7,63028E-01	4,70215E-01	1,86043E-01	5,05796E-02	8,52361E-03	0,0	0,0	0,0	0,0
		0,0	0,0	0,0							
7		1,39664E-01	2,77196E-01	1,38575E-01	5,49621E-02	1,11297E-02	0,0	0,0	0,0	0,0	0,0
		0,0	0,0	0,0							
8		2,59798E-02	2,38605E-02	6,92793E-02	1,93708E-02	0,0	0,0	0,0	0,0	0,0	0,0
		0,0	0,0	0,0							
9		3,74442E-04	9,74782E-03	1,29663E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0
		0,0	0,0	0,0							
10		0,0	0,0	0,0	2,86082E-05	5,05840E-05	0,0	0,0	0,0	0,0	0,0
		0,0	0,0	0,0							

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NUCLID = PU243 MAT NO = 7181
INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.56771E+00	1.53536E+00	4.32446E+00	3.01992E-03	3.39192E+00	3.07135E-01	1.33028E+00	8.65379E-01	2.13757E-02
2	7.20957E+00	1.13460E+00	3.78405E+00	4.18108E-03	4.00209E+00	1.76218E+00	3.06508E-01	8.25765E-01	2.20789E-02
3	7.10546E+00	1.28559E+00	3.46746E+00	6.03028E-03	3.70000E+00	2.11383E+00	0.0	7.35374E-01	2.24013E-02
4	7.09774E+00	1.36813E+00	3.24990E+00	1.61226E-02	3.42435E+00	2.26914E+00	0.0	6.49149E-01	1.80878E-02
5	7.95325E+00	1.09365E+00	3.11281E+00	3.88177E-02	4.26675E+00	2.55407E+00	0.0	5.75488E-01	3.94698E-02
6	8.97327E+00	4.27524E-01	3.01664E+00	8.06251E-02	6.28726E+00	2.17786E+00	0.0	3.46596E-01	6.37343E-02
7	9.97975E+00	4.33719E-01	2.96310E+00	1.59023E-01	8.52967E+00	8.57345E-01	0.0	2.34180E-01	9.04677E-02
8	1.07038E+01	4.77899E-01	2.93703E+00	2.06628E-01	9.79767E+00	2.21585E-01	0.0	1.41856E-01	1.10278E-01
9	1.13060E+01	5.62855E-01	2.92424E+00	2.54451E-01	1.04642E+01	2.44139E-02	0.0	5.99552E-02	1.11752E-01
10	1.19765E+01	7.09236E-01	2.91767E+00	4.68040E-01	1.07992E+01	0.0	0.0	2.20165E-02	1.15713E-01
11	1.26357E+01	8.93416E-01	2.91463E+00	7.87639E-01	1.09546E+01	0.0	0.0	6.40917E-03	1.18959E-01
12	1.38606E+01	1.15428E+00	2.91299E+00	1.55744E+00	1.11491E+01	0.0	0.0	2.76717E-03	1.22808E-01
13	1.47907E+01	1.53609E+00	2.91257E+00	1.91670E+00	1.13379E+01	0.0	0.0	2.76717E-03	1.22267E-01
14	1.57989E+01	2.12948E+00	2.91226E+00	2.24393E+00	1.14255E+01	0.0	0.0	2.76717E-03	1.23843E-01
15	1.74396E+01	2.98679E+00	2.91212E+00	2.98679E+00	1.14660E+01	0.0	0.0	2.76717E-03	1.24094E-01
16	1.99114E+01	4.21323E+00	2.91206E+00	4.21323E+00	1.14849E+01	0.0	0.0	2.76717E-03	1.23316E-01
17	2.33803E+01	5.94333E+00	2.91203E+00	5.94333E+00	1.14937E+01	0.0	0.0	2.76717E-03	1.24334E-01
18	2.82006E+01	8.35142E+00	2.91201E+00	8.35142E+00	1.14977E+01	0.0	0.0	2.76717E-03	1.24322E-01
19	3.90073E+01	1.33126E+01	2.91201E+00	1.30360E+01	1.26587E+01	0.0	0.0	2.76717E-03	2.41913E-01
20	1.11008E+02	5.50080E+01	2.91200E+00	3.06401E+01	2.53597E+01	0.0	0.0	2.76717E-03	2.42737E-01
21	1.34511E+02	7.48364E+01	2.91200E+00	3.65021E+01	2.31729E+01	0.0	0.0	2.76717E-03	2.47812E-01
22	1.63894E+02	9.50786E+01	2.91200E+00	4.63751E+01	2.24404E+01	0.0	0.0	2.76717E-03	2.41403E-01
23	5.76164E+02	3.71279E+02	2.91200E+00	1.81099E+02	2.37858E+01	0.0	0.0	2.76717E-03	2.02782E-01
24	7.84039E+01	2.78481E+01	2.91200E+00	3.17414E+01	1.88144E+01	0.0	0.0	2.76717E-03	1.84848E-01
25	1.42636E+02	5.14131E+01	2.91200E+00	7.63750E+01	1.48474E+01	0.0	0.0	5.92286E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU243 MATNO = 7181
REACTION = TOTAL
TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9999	0.9988	0.9972	0.9967	
2	0.9997	0.9997	0.9997	0.9996	0.9995	0.9995	
3	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998	
4	0.9999	0.9999	0.9998	0.9994	0.9989	0.9988	
5	1.0000	1.0000	0.9999	0.9995	0.9991	0.9989	
6	1.0000	1.0000	0.9996	0.9977	0.9954	0.9949	
7	1.0000	1.0000	0.9999	0.9997	0.9994	0.9993	
8	1.0000	1.0000	1.0000	0.9997	0.9995	0.9995	
9	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996	
10	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995	
11	1.0000	1.0000	0.9999	0.9997	0.9996	0.9995	
12	1.0000	1.0000	0.9998	0.9991	0.9986	0.9985	
13	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996	
14	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989	
15	1.0000	1.0000	0.9997	0.9987	0.9981	0.9979	
16	1.0000	0.9999	0.9995	0.9979	0.9970	0.9969	
17	1.0000	0.9999	0.9992	0.9969	0.9957	0.9956	
18	1.0000	0.9998	0.9987	0.9952	0.9937	0.9935	
19	0.9998	0.9980	0.9861	0.9565	0.9478	0.9467	
20	0.9433	0.6570	0.4339	0.3284	0.3108	0.3087	
21	0.8794	0.5053	0.2930	0.2502	0.2440	0.2432	
22	0.8264	0.4342	0.2632	0.2271	0.2217	0.2210	
23	0.7270	0.3139	0.1669	0.1372	0.1333	0.1329	
24	0.9981	0.9828	0.8936	0.8022	0.7851	0.7830	
25	0.9998	0.9981	0.9913	0.9860	0.9851	0.9850	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU243 MATNO = 7181

REACTION = ELASTIC

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.33919E+01	0.9998	0.9998	0.9996	0.9985	0.9970	0.9966
2	0.40021E+01	1.0007	1.0007	1.0006	1.0006	1.0006	1.0006
3	0.37000E+01	1.0000	1.0000	1.0000	0.9998	0.9995	0.9994
4	0.34244E+01	1.0000	1.0000	1.0000	0.9998	0.9994	0.9994
5	0.42668E+01	1.0000	1.0000	0.9999	0.9989	0.9983	0.9980
6	0.62873E+01	1.0000	0.9999	0.9995	0.9976	0.9949	0.9942
7	0.85297E+01	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
8	0.97977E+01	1.0000	1.0000	0.9999	0.9998	0.9997	0.9997
9	0.10464E+02	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
10	0.10799E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.10955E+02	1.0000	1.0000	1.0000	0.9999	1.0001	1.0001
12	0.11149E+02	1.0000	1.0000	1.0001	1.0001	1.0001	1.0001
13	0.11338E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
14	0.11426E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.11466E+02	1.0000	1.0000	0.9999	0.9997	0.9998	0.9998
16	0.11485E+02	1.0000	1.0000	0.9999	0.9997	0.9997	0.9997
17	0.11494E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
18	0.11498E+02	1.0000	1.0000	0.9999	0.9997	0.9997	0.9997
19	0.12659E+02	0.9998	0.9977	0.9855	0.9685	0.9642	0.9637
20	0.25360E+02	0.9970	0.9808	0.9486	0.9224	0.9161	0.9153
21	0.23173E+02	0.9939	0.9685	0.9418	0.9323	0.9306	0.9304
22	0.22440E+02	0.9920	0.9663	0.9443	0.9370	0.9357	0.9356
23	0.23786E+02	0.9720	0.9078	0.8654	0.8541	0.8525	0.8523
24	0.18814E+02	1.0001	1.0008	1.0037	1.0067	1.0073	1.0074
25	0.14847E+02	1.0001	1.0009	1.0042	1.0066	1.0070	1.0071

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU243 MATNO = 7181

REACTION = CAPTURE

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.30199E-02	0.9999	0.9999	0.9996	0.9977	0.9949	0.9941
2	0.41811E-02	1.0003	1.0003	1.0003	0.9999	0.9997	0.9997
3	0.60303E-02	1.0000	1.0000	1.0002	1.0012	1.0025	1.0028
4	0.16123E-01	1.0012	1.0012	1.0009	0.9993	0.9968	0.9963
5	0.38818E-01	1.0001	1.0001	0.9997	0.9979	0.9953	0.9948
6	0.80625E-01	0.9999	0.9998	0.9987	0.9923	0.9853	0.9836
7	0.15902E+00	1.0001	1.0001	0.9999	0.9988	0.9977	0.9976
8	0.20663E+00	1.0001	1.0001	1.0000	0.9997	0.9995	0.9994
9	0.25445E+00	1.0000	1.0000	0.9999	0.9991	0.9985	0.9983
10	0.46804E+00	1.0000	0.9999	0.9997	0.9985	0.9974	0.9971
11	0.78764E+00	1.0001	1.0001	0.9999	0.9988	0.9980	0.9978
12	0.15574E+01	0.9997	0.9996	0.9991	0.9971	0.9955	0.9952
13	0.19167E+01	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
14	0.22439E+01	1.0000	0.9999	0.9997	0.9990	0.9984	0.9983
15	0.29868E+01	1.0000	0.9999	0.9995	0.9982	0.9973	0.9971
16	0.42132E+01	1.0000	0.9999	0.9993	0.9972	0.9962	0.9963
17	0.59433E+01	1.0000	0.9999	0.9991	0.9965	0.9952	0.9954
18	0.83514E+01	1.0000	0.9998	0.9989	0.9961	0.9951	0.9949
19	0.13036E+02	0.9997	0.9969	0.9802	0.9562	0.9496	0.9488
20	0.30640E+02	0.9611	0.7688	0.4704	0.3132	0.2812	0.2772
21	0.36502E+02	0.9207	0.6046	0.2762	0.1766	0.1615	0.1597
22	0.46375E+02	0.8890	0.5373	0.2526	0.1729	0.1609	0.1595
23	0.18110E+03	0.8373	0.4684	0.2375	0.1796	0.1718	0.1708
24	0.31741E+02	0.9981	0.9829	0.8992	0.8033	0.7823	0.7797
25	0.76375E+02	0.9999	0.9987	0.9946	0.9910	0.9904	0.9903

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = PU243 MATNO = 7181
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X=SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.15354E+01	1.0000	1.0000	1.0003	1.0023	1.0047	1.0054
2	0.11346E+01	1.0003	1.0003	1.0003	1.0002	1.0003	1.0003
3	0.12856E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0003
4	0.13881E+01	1.0001	1.0001	1.0000	0.9996	1.0000	1.0001
5	0.10937E+01	1.0000	1.0000	1.0001	1.0021	1.0046	1.0052
6	0.42752E+00	1.0000	1.0000	1.0003	1.0020	1.0039	1.0043
7	0.43372E+00	1.0000	1.0000	0.9999	0.9999	0.9995	0.9995
8	0.47790E+00	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
9	0.56285E+00	1.0000	1.0000	0.9999	0.9994	0.9990	0.9990
10	0.70924E+00	1.0000	1.0000	0.9999	0.9994	0.9990	0.9989
11	0.89342E+00	1.0000	1.0000	0.9999	0.9994	0.9990	0.9989
12	0.11543E+01	0.9999	0.9999	0.9996	0.9985	0.9977	0.9975
13	0.15361E+01	1.0000	1.0000	0.9998	0.9992	0.9990	0.9989
14	0.21295E+01	1.0000	1.0000	0.9997	0.9986	0.9980	0.9979
15	0.29868E+01	1.0000	0.9999	0.9995	0.9982	0.9973	0.9971
16	0.42132E+01	1.0000	0.9999	0.9993	0.9972	0.9962	0.9963
17	0.59433E+01	1.0000	0.9999	0.9991	0.9965	0.9952	0.9954
18	0.83514E+01	1.0000	0.9998	0.9989	0.9961	0.9951	0.9949
19	0.13313E+02	0.9996	0.9965	0.9774	0.9500	0.9426	0.9417
20	0.55008E+02	0.9554	0.7365	0.4187	0.2775	0.2508	0.2474
21	0.74836E+02	0.9207	0.6046	0.2762	0.1766	0.1615	0.1597
22	0.95079E+02	0.8890	0.5372	0.2526	0.1729	0.1609	0.1594
23	0.37128E+03	0.8373	0.4684	0.2374	0.1796	0.1717	0.1708
24	0.27848E+02	0.9990	0.9910	0.9477	0.8977	0.8869	0.8855
25	0.51413E+02	0.9999	0.9987	0.9946	0.9910	0.9904	0.9903

NUCLID = PU243 MAT NUMBER = 7181

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP		** KK **	KK = I + J - 1
	J=1	2		
1	3.37054E+00	2.13757E-02		
2	3.98002E+00	2.20787E-02		
3	3.87760E+00	2.24014E-02		
4	3.40626E+00	1.80878E-02		
5	4.22728E+00	3.94698E-02		
6	6.22352E+00	6.37344E-02		
7	8.43920E+00	9.04676E-02		
8	9.68739E+00	1.10279E-01		
9	1.03525E+01	1.11752E-01		
10	1.06839E+01	1.15713E-01		
11	1.08357E+01	1.18959E-01		
12	1.10273E+01	1.21808E-01		
13	1.12156E+01	1.22267E-01		
14	1.13017E+01	1.23843E-01		
15	1.13419E+01	1.24094E-01		
16	1.13616E+01	1.23316E-01		
17	1.13693E+01	1.24334E-01		
18	1.13734E+01	1.24322E-01		
19	1.24168E+01	2.41913E-01		
20	2.51170E+01	2.42737E-01		
21	2.29250E+01	2.47812E-01		
22	2.21990E+01	2.41403E-01		
23	2.35831E+01	2.02782E-01		
24	1.86296E+01	1.84848E-01		
25	1.48474E+01	0.0		

NUCLID = PU243 MAT NUMBER = 7181

TABLE OF INEL+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	1	11	2	3	4						
1	1	1.49502E-04	1.54011E-03	3.05752E-02	1.92547E-01	6.48650E-01	9.96456E-01	6.76609E-01	2.88232E-01	1.02194E-01	2.64155E-02
		4.32633E-03	0.0								
2	1	9.92482E-03	1.22340E-01	4.34875E-01	5.53488E-01	5.51300E-01	3.25011E-01	1.71204E-01	1.38890E-01	5.61846E-02	1.11819E-02
		0.0	7.99946E-04								
3	1	6.31923E-02	4.30489E-01	5.91329E-01	6.08315E-01	2.86157E-01	9.52687E-02	2.97569E-02	7.98491E-03	1.33889E-03	0.0
		0.0	0.0								
4	1	2.89178E-01	5.72451E-01	7.39580E-01	4.36756E-01	1.61118E-01	5.33040E-02	1.43724E-02	2.38232E-03	0.0	0.0
		0.0	0.0								
5	1	3.03448E-01	9.99779E-01	7.45821E-01	3.45004E-01	1.23204E-01	3.16181E-02	5.19122E-03	0.0	0.0	0.0
		0.0	0.0								
6	1	5.68436E-01	8.99288E-01	4.71046E-01	1.82297E-01	4.86601E-02	8.13195E-03	0.0	0.0	0.0	0.0
		0.0	0.0								
7	1	2.76926E-01	3.12659E-01	1.35094E-01	1.00394E-01	3.22722E-02	0.0	0.0	0.0	0.0	0.0
		0.0	0.0								
8	1	2.94302E-02	1.43890E-02	1.26402E-01	5.13630E-02	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0								
9	1	0.0	1.00951E-02	1.43188E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0								

NUCLID = AM241 MAT NO = 1056
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	7.54805E+00	2.50508E+00	4.32531E+00	1.60659E+03	3.88553E+00	1.15583E+00	0.0	7.95014E-01
2	8.79603E+00	1.87897E+00	3.88400E+00	3.32629E-03	4.39680E+00	2.51693E+00	0.0	7.71028E-01
3	8.87287E+00	1.74944E+00	3.59595E+00	6.92037E-03	4.50227E+00	2.61424E+00	0.0	7.00131E-01
4	8.04296E+00	1.65341E+00	3.40020E+00	1.60267E-02	3.88526E+00	2.48827E+00	0.0	5.36464E-01
5	7.62097E+00	1.19033E+00	3.27133E+00	4.01274E-02	4.28230E+00	2.10822E+00	0.0	4.25856E-01
6	7.68823E+00	1.52219E-01	3.19973E+00	1.05801E-01	5.79197E+00	1.63824E+00	0.0	3.59049E-01
7	8.93232E+00	4.79937E-03	3.13744E+00	2.22670E-01	7.46083E+00	1.24402E+00	0.0	2.68950E-01
8	1.02217E+01	2.39527E-02	3.11394E+00	4.56599E-01	9.02952E+00	7.11622E-01	0.0	1.24277E-01
9	1.02065E+01	2.13719E-02	3.09937E+00	8.43877E-01	9.09660E+00	2.44678E-01	0.0	5.33760E-02
10	1.16743E+01	2.11268E-01	3.09469E+00	1.42897E+00	1.00323E+01	1.82330E-03	0.0	2.20094E-02
11	1.39613E+01	8.14006E-01	3.09229E+00	2.39530E+00	1.07520E+01	0.0	0.0	6.24710E-03
12	1.58930E+01	5.93310E-01	3.09115E+00	3.94873E+00	1.13510E+01	0.0	0.0	2.78998E-03
13	1.93416E+01	1.04712E+00	3.09038E+00	6.41616E+00	1.18783E+01	0.0	0.0	2.78998E-03
14	2.39057E+01	1.33054E+00	3.09024E+00	1.02335E+01	1.23416E+01	0.0	0.0	2.78998E-03
15	3.02519E+01	1.51108E+00	3.09011E+00	1.60058E+01	1.27350E+01	0.0	0.0	2.78998E-03
16	3.91147E+01	1.39715E+00	3.09005E+00	2.46555E+01	1.30620E+01	0.0	0.0	2.78998E-03
17	5.15461E+01	7.33427E-01	3.09002E+00	3.74922E+01	1.33205E+01	0.0	0.0	2.78998E-03
18	7.07230E+01	7.76332E-01	3.09001E+00	5.64290E+01	1.35177E+01	0.0	0.0	2.78998E-03
19	9.80636E+01	8.16600E-01	3.09001E+00	8.35832E+01	1.36638E+01	0.0	0.0	2.78998E-03
20	4.00805E+02	1.86862E+00	3.09000E+00	3.70101E+02	2.88354E+01	0.0	0.0	2.78998E-03
21	5.20563E+02	3.05743E+00	3.09000E+00	4.99208E+02	1.82977E+01	0.0	0.0	2.78998E-03
22	5.44676E+02	9.15232E-01	3.09000E+00	5.30992E+02	1.27694E+01	0.0	0.0	2.78998E-03
23	2.32830E+03	1.39871E+01	3.09000E+00	2.28434E+03	2.99711E+01	0.0	0.0	2.78998E-03
24	1.21494E+03	5.53686E+00	3.09000E+00	1.19751E+03	1.18979E+01	0.0	0.0	2.78998E-03
25	1.86300E+03	1.29089E+01	3.09000E+00	1.84024E+03	9.85187E+00	0.0	0.0	4.50286E-03

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM241 MATNO = 1056
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	0.9805
1	1.0000	0.9999	0.9988	0.9919	0.9829	0.9805	0.9805
2	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
3	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9996
4	1.0000	1.0000	0.9999	0.9990	0.9977	0.9974	0.9974
5	1.0000	1.0000	1.0000	0.9997	0.9993	0.9992	0.9992
6	0.9999	0.9999	0.9997	0.9987	0.9974	0.9970	0.9970
7	0.9999	0.9998	0.9996	0.9984	0.9970	0.9967	0.9967
8	0.9999	0.9998	0.9995	0.9978	0.9962	0.9959	0.9959
9	1.0000	1.0000	0.9998	0.9991	0.9984	0.9983	0.9983
10	0.9999	0.9999	0.9996	0.9980	0.9966	0.9963	0.9963
11	1.0000	0.9999	0.9995	0.9973	0.9955	0.9952	0.9952
12	1.0000	1.0000	0.9996	0.9982	0.9973	0.9971	0.9971
13	1.0000	0.9998	0.9987	0.9946	0.9921	0.9917	0.9917
14	1.0000	0.9998	0.9985	0.9940	0.9917	0.9914	0.9914
15	1.0000	0.9997	0.9978	0.9926	0.9903	0.9900	0.9900
16	1.0000	0.9996	0.9972	0.9916	0.9896	0.9893	0.9893
17	0.9999	0.9994	0.9953	0.9878	0.9856	0.9853	0.9853
18	0.9999	0.9990	0.9935	0.9856	0.9837	0.9835	0.9835
19	0.9997	0.9982	0.9903	0.9823	0.9807	0.9805	0.9805
20	0.9826	0.6484	0.3643	0.2437	0.2231	0.2206	0.2206
21	0.9755	0.6319	0.2457	0.1671	0.1574	0.1563	0.1563
22	0.9790	0.6476	0.3206	0.2407	0.2311	0.2300	0.2300
23	0.8174	0.3758	0.1774	0.1495	0.1462	0.1459	0.1459
24	0.8647	0.4374	0.2623	0.2339	0.2309	0.2306	0.2306
25	0.7864	0.4429	0.3451	0.3300	0.3284	0.3283	0.3283

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM241 MATNO = 1056
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.38855E+01	0.9999	0.9998	0.9992	0.9962	0.9921	0.9910
2	0.43968E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0.45023E+01	1.0000	1.0000	1.0000	1.0000	0.9997	0.9998
4	0.38853E+01	1.0002	1.0002	1.0001	0.9994	0.9986	0.9986
5	0.42823E+01	1.0004	1.0004	1.0007	1.0011	1.0018	1.0020
6	0.57920E+01	1.0000	1.0000	0.9997	0.9984	0.9970	0.9968
7	0.74608E+01	1.0000	1.0000	0.9998	0.9987	0.9975	0.9973
8	0.90295E+01	1.0000	1.0000	0.9998	0.9988	0.9977	0.9974
9	0.90966E+01	0.9997	0.9997	0.9997	0.9992	0.9991	0.9990
10	0.10032E+02	0.9999	0.9999	0.9999	0.9994	0.9994	0.9993
11	0.10752E+02	1.0000	1.0000	1.0002	0.9997	0.9994	0.9994
12	0.11351E+02	1.0002	1.0002	1.0004	0.9999	0.9997	0.9997
13	0.11878E+02	1.0000	1.0002	1.0001	0.9998	0.9994	0.9994
14	0.12342E+02	1.0000	1.0000	0.9995	0.9996	0.9994	0.9994
15	0.12735E+02	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
16	0.13062E+02	1.0000	0.9999	0.9998	0.9996	0.9995	0.9994
17	0.13320E+02	1.0000	1.0000	0.9998	0.9998	0.9998	0.9998
18	0.13518E+02	1.0000	1.0000	0.9999	0.9996	0.9997	0.9997
19	0.13664E+02	1.0056	1.0008	0.9996	0.9997	0.9996	0.9997
20	0.28835E+02	0.8746	0.6483	0.5370	0.5061	0.5001	0.4995
21	0.18298E+02	0.9290	0.7910	0.6805	0.6387	0.6316	0.6308
22	0.12769E+02	0.9882	0.7443	0.8601	0.8374	0.8340	0.8336
23	0.29971E+02	0.8746	0.6475	0.5056	0.4746	0.4707	0.4703
24	0.11898E+02	0.9758	0.9047	0.8188	0.7980	0.7956	0.7953
25	0.96519E+01	0.9604	0.6756	0.8323	0.8257	0.8250	0.8249

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM241 MATNO = 1056
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.16066E-02	0.9998	0.9997	0.9985	0.9924	0.9842	0.9821
2	0.33263E-02	1.0001	1.0001	1.0001	1.0003	1.0005	1.0006
3	0.69204E-02	1.0005	1.0005	1.0005	1.0006	1.0005	1.0004
4	0.16027E-01	1.0006	1.0007	1.0013	1.0049	1.0090	1.0101
5	0.40127E-01	1.0004	1.0004	1.0009	1.0028	1.0054	1.0060
6	0.10580E+00	1.0000	0.9999	0.9993	0.9959	0.9916	0.9907
7	0.22267E+00	1.0000	0.9999	0.9994	0.9961	0.9927	0.9919
8	0.45660E+00	1.0000	0.9999	0.9991	0.9953	0.9916	0.9908
9	0.84388E+00	0.9998	0.9997	0.9994	0.9978	0.9958	0.9954
10	0.14290E+01	1.0005	1.0004	0.9997	0.9972	0.9947	0.9942
11	0.23953E+01	1.0001	0.9998	0.9992	0.9960	0.9937	0.9933
12	0.39487E+01	1.0002	1.0001	0.9993	0.9966	0.9950	0.9946
13	0.64162E+01	0.9999	0.9997	0.9986	0.9939	0.9912	0.9907
14	0.10234E+02	1.0001	0.9999	0.9983	0.9935	0.9911	0.9908
15	0.16006E+02	0.9999	0.9997	0.9981	0.9932	0.9910	0.9906
16	0.24696E+02	1.0000	0.9997	0.9975	0.9924	0.9907	0.9905
17	0.37492E+02	1.0002	0.9998	0.9967	0.9915	0.9902	0.9900
18	0.56429E+02	1.0003	0.9999	0.9963	0.9912	0.9900	0.9899
19	0.83583E+02	1.0060	1.0000	0.9940	0.9894	0.9886	0.9884
20	0.37010E+03	0.8526	0.5653	0.3821	0.3097	0.3085	0.3075
21	0.49921E+03	0.8918	0.6235	0.3654	0.2730	0.2577	0.2558
22	0.53099E+03	0.9379	0.6963	0.4375	0.3537	0.3401	0.3387
23	0.22843E+04	0.8175	0.4611	0.2502	0.2060	0.2007	0.2001
24	0.11975E+04	0.8968	0.5899	0.3550	0.3050	0.2992	0.2986
25	0.18402E+04	0.8791	0.6213	0.4900	0.4681	0.4657	0.4655

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM241 MATNO = 1056
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.25051E+01	0.9999	0.9999	1.0002	1.0022	1.0045	1.0052
2	0.18790E+01	1.0000	1.0000	0.9999	1.0000	0.9999	0.9999
3	0.17494E+01	1.0005	1.0005	1.0005	1.0004	1.0004	1.0004
4	0.16534E+01	1.0000	1.0000	0.9998	0.9993	0.9985	0.9981
5	0.11903E+01	1.0000	1.0000	0.9997	0.9983	0.9958	0.9952
6	0.15222E+00	1.0000	1.0003	1.0024	1.0144	1.0295	1.0333
7	0.47994E-02	0.9998	0.9998	1.0001	1.0019	1.0037	1.0042
8	0.23953E-01	1.0000	1.0001	1.0008	1.0041	1.0073	1.0079
9	0.21372E-01	0.9999	0.9997	0.9978	0.9885	0.9796	0.9776
10	0.21127E+00	1.0000	0.9998	0.9981	0.9901	0.9829	0.9814
11	0.81401E+00	1.0000	0.9998	0.9986	0.9929	0.9885	0.9876
12	0.59331E+00	1.0000	1.0001	1.0007	1.0032	1.0049	1.0052
13	0.10411E+01	0.9999	0.9997	0.9975	0.9897	0.9850	0.9843
14	0.13305E+01	1.0000	0.9999	0.9992	0.9968	0.9955	0.9954
15	0.15111E+01	1.0000	1.0001	1.0005	1.0018	1.0023	1.0025
16	0.13972E+01	1.0001	1.0006	1.0049	1.0137	1.0166	1.0170
17	0.73343E+00	1.0000	1.0000	0.9994	0.9983	0.9979	0.9979
18	0.77633E+00	1.0000	0.9996	0.9971	0.9924	0.9911	0.9909
19	0.81660E+00	0.9997	0.9974	0.9859	0.9745	0.9722	0.9719
20	0.18686E+01	0.8074	0.4674	0.3103	0.2704	0.2632	0.2630
21	0.30574E+01	0.8533	0.5493	0.3059	0.2214	0.2075	0.2085
22	0.91523E+00	0.9385	0.7866	0.5416	0.4464	0.4344	0.4304
23	0.13987E+02	0.7924	0.4060	0.1968	0.1554	0.1506	0.1500
24	0.55369E+01	0.9030	0.6091	0.3800	0.3308	0.3251	0.3246
25	0.12909E+02	0.8792	0.6185	0.4850	0.4627	0.4602	0.4599

NUCLID = AM241 MAT NUMBER = 1056

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J = 1	2		
1	3.84666E+00	3.88757E-02		
2	4.36774E+00	2.90636E-02		
3	4.47081E+00	3.14626E-02		
4	3.85600E+00	2.92598E-02		
5	4.24048E+00	4.18221E-02		
6	5.73721E+00	5.47633E-02		
7	7.38043E+00	8.04029E-02		
8	8.91858E+00	1.10939E-01		
9	8.99532E+00	1.01281E-01		
10	9.92069E+00	1.11567E-01		
11	1.06313E+01	1.20721E-01		
12	1.12242E+01	1.26801E-01		
13	1.17471E+01	1.31226E-01		
14	1.22047E+01	1.36870E-01		
15	1.25943E+01	1.40699E-01		
16	1.29192E+01	1.42773E-01		
17	1.31741E+01	1.46408E-01		
18	1.33695E+01	1.48222E-01		
19	1.35153E+01	1.48478E-01		
20	2.87154E+01	1.20002E-01		
21	1.82088E+01	8.88999E-02		
22	1.26627E+01	1.06661E-01		
23	2.96797E+01	2.91442E-01		
24	1.17927E+01	1.05185E-01		
25	9.89187E+00	0.0		

NUCLID = AM241 MAT NUMBER = 1056
 TABLE OF INELASTIC (N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
J =	1	2	3	4						
1	11	12								
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

NUCLID = AM242 MAT NO = 7183
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL	
1	6.93364E+00	2.12354E+00	4.53054E+00	7.53967E-03	3.61728E+00	2.76013E-01	9.09269E-01	8.45734E-01	2.48216E-02
2	7.37078E+00	1.85880E+00	4.06443E+00	1.42413E-02	4.15014E+00	1.26230E+00	8.52988E-02	8.22493E-01	2.29211E-02
3	7.18444E+00	1.98537E+00	3.75573E+00	3.47923E-02	3.86344E+00	1.30083E+00	0.0	7.60592E-01	2.07563E-02
4	6.67110E+00	2.11444E+00	3.54224E+00	6.96773E-02	3.31638E+00	1.17060E+00	0.0	6.61886E-01	1.75353E-02
5	7.08524E+00	2.22525E+00	3.40296E+00	1.45125E-01	3.72933E+00	9.85539E-01	0.0	5.57516E-01	3.57809E-02
6	9.56771E+00	2.37540E+00	3.31558E+00	1.45977E-01	6.46926E+00	5.77078E-01	0.0	3.46449E-01	6.72765E-02
7	1.15973E+01	2.54539E+00	3.26622E+00	1.80859E-01	8.58252E+00	2.88539E-01	0.0	2.06315E-01	9.47638E-02
8	1.29204E+01	2.93341E+00	3.24058E+00	2.33655E-01	9.66478E+00	8.85039E-02	0.0	1.14821E-01	1.09257E-01
9	1.43049E+01	3.39964E+00	3.22815E+00	4.11768E-01	1.04935E+01	0.0	0.0	8.07872E-02	1.12080E-01
10	1.55031E+01	3.67279E+00	3.22193E+00	7.15389E-01	1.111149E+01	0.0	0.0	7.26398E-03	1.21753E-01
11	1.67718E+01	4.42971E+00	3.21896E+00	9.30562E-01	1.14115E+01	0.0	0.0	2.77870E-03	1.24877E-01
12	2.01449E+01	7.45330E+00	3.21764E+00	1.07258E+00	1.16190E+01	0.0	0.0	2.77870E-03	1.27159E-01
13	2.38977E+01	1.09613E+01	3.21703E+00	1.16682E+00	1.17696E+01	0.0	0.0	2.77870E-03	1.27307E-01
14	2.66924E+01	1.35022E+01	3.21675E+00	1.35063E+00	1.18396E+01	0.0	0.0	2.77870E-03	1.28798E-01
15	2.91392E+01	1.56975E+01	3.21662E+00	1.56975E+00	1.18719E+01	0.0	0.0	2.77870E-03	1.28989E-01
16	4.04238E+01	2.59426E+01	3.21655E+00	2.59426E+00	1.18870E+01	0.0	0.0	2.77870E-03	1.28148E-01
17	4.53335E+01	3.03996E+01	3.21653E+00	3.03999E+00	1.18940E+01	0.0	0.0	2.77870E-03	1.29192E-01
18	6.84461E+01	5.14081E+01	3.21651E+00	5.14081E+00	1.18972E+01	0.0	0.0	2.77870E-03	1.29173E-01
19	8.04427E+01	6.23127E+01	3.21651E+00	6.23127E+00	1.18987E+01	0.0	0.0	2.77870E-03	1.28232E-01
20	1.45175E+02	1.21159E+02	3.21650E+00	1.21159E+01	1.18994E+01	0.0	0.0	2.77870E-03	1.29230E-01
21	1.83417E+02	1.55925E+02	3.21650E+00	1.55925E+01	1.18997E+01	0.0	0.0	2.77870E-03	1.29191E-01
22	3.53545E+02	3.10586E+02	3.21650E+00	3.10586E+01	1.18999E+01	0.0	0.0	2.77870E-03	1.28240E-01
23	4.80139E+02	4.25672E+02	3.21650E+00	4.25672E+01	1.18999E+01	0.0	0.0	2.77870E-03	1.29231E-01
24	1.01929E+03	8.99119E+02	3.21650E+00	1.08267E+02	1.19000E+01	0.0	0.0	2.77870E-03	1.29189E-01
25	2.94473E+03	2.46214E+03	3.21650E+00	4.70685E+02	1.19000E+01	0.0	0.0	6.35065E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM242 MATNO = 7183
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000,	1000,	100,	10,	1,	0,	
1	1.0000	1.0000	0.9998	0.9986	0.9966	0.9959	
2	0.9999	0.9998	0.9998	0.9998	0.9997	0.9997	
3	0.9989	0.9989	0.9988	0.9984	0.9979	0.9978	
4	0.9993	0.9993	0.9993	0.9992	0.9991	0.9991	
5	1.0000	1.0000	0.9999	0.9993	0.9986	0.9984	
6	1.0000	0.9999	0.9986	0.9921	0.9849	0.9832	
7	1.0000	1.0000	0.9997	0.9987	0.9977	0.9975	
8	1.0000	1.0000	0.9999	0.9993	0.9988	0.9988	
9	1.0000	1.0000	0.9998	0.9990	0.9984	0.9982	
10	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995	
11	1.0000	1.0000	0.9999	0.9994	0.9992	0.9991	
12	1.0000	0.9998	0.9982	0.9926	0.9894	0.9889	
13	1.0000	1.0000	0.9997	0.9990	0.9987	0.9986	
14	1.0000	0.9999	0.9994	0.9980	0.9973	0.9972	
15	1.0000	0.9999	0.9995	0.9983	0.9978	0.9977	
16	0.9998	0.9981	0.9802	0.9435	0.9309	0.9291	
17	1.0000	0.9993	0.9761	0.9302	0.9149	0.9127	
18	0.9995	0.9916	0.9243	0.8467	0.8280	0.8256	
19	0.9997	0.9635	0.7877	0.6039	0.5577	0.5516	
20	0.9996	0.9790	0.8812	0.8093	0.7967	0.7951	
21	0.9941	0.9280	0.7532	0.6708	0.6588	0.6574	
22	0.9975	0.9599	0.8668	0.8313	0.8267	0.8262	
23	0.9982	0.9878	0.9698	0.9639	0.9632	0.9632	
24	0.9871	0.9228	0.8620	0.8506	0.8494	0.8492	
25	0.9422	0.8111	0.7580	0.7510	0.7503	0.7502	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM242 MATNO = 7183
 REACTION = ELASTIC
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.36173E+01	0.9999	0.9999	0.9997	0.9985	0.9967	0.9963
2	0.41501E+01	1.0001	1.0000	1.0000	1.0000	1.0000	0.9999
3	0.38634E+01	1.0000	1.0000	0.9999	0.9995	0.9989	0.9988
4	0.33164E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
5	0.37293E+01	1.0000	1.0000	0.9996	0.9979	0.9960	0.9955
6	0.64693E+01	1.0000	0.9999	0.9991	0.9942	0.9889	0.9879
7	0.85825E+01	1.0000	1.0000	0.9998	0.9990	0.9983	0.9982
8	0.96648E+01	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
9	0.10493E+02	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
10	0.11115E+02	1.0000	1.0000	0.9999	1.0000	1.0001	1.0001
11	0.11411E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	0.11619E+02	1.0000	1.0000	1.0000	0.9999	0.9996	0.9996
13	0.11770E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.11840E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.11872E+02	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
16	0.11887E+02	0.9997	1.0000	1.0000	1.0000	1.0001	1.0001
17	0.11894E+02	0.9998	0.9999	1.0000	1.0000	1.0000	1.0000
18	0.11897E+02	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.11899E+02	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000
20	0.11899E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.11900E+02	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.11900E+02	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
23	0.11900E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.11900E+02	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000
25	0.11900E+02	0.9997	1.0000	1.0000	1.0002	1.0001	1.0001

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM242 MATNO = 7183
 REACTION = CAPTURE
 TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.75397E-02	0.9999	0.9999	0.9996	0.9977	0.9949	0.9942
2	0.14241E-01	1.0000	1.0000	0.9998	0.9987	0.9972	0.9968
3	0.34792E-01	1.0000	1.0000	1.0003	1.0017	1.0035	1.0040
4	0.69677E-01	1.0000	1.0000	0.9999	0.9994	0.9999	0.9998
5	0.14512E+00	1.0000	1.0000	0.9998	0.9990	0.9980	0.9978
6	0.14598E+00	1.0000	1.0000	1.0002	1.0011	1.0023	1.0025
7	0.18086E+00	1.0003	1.0003	0.9998	0.9977	0.9961	0.9957
8	0.23366E+00	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
9	0.41177E+00	1.0000	0.9999	0.9991	0.9959	0.9933	0.9928
10	0.71539E+00	1.0000	1.0000	0.9997	0.9988	0.9982	0.9981
11	0.93056E+00	1.0000	1.0000	0.9999	0.9994	0.9990	0.9990
12	0.10726E+01	0.9998	0.9997	0.9995	0.9982	0.9974	0.9972
13	0.11668E+01	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
14	0.13506E+01	1.0000	0.9999	0.9994	0.9980	0.9973	0.9972
15	0.15698E+01	1.0000	1.0001	0.9992	0.9975	0.9971	0.9970
16	0.25943E+01	0.9997	0.9973	0.9822	0.9542	0.9448	0.9435
17	0.30400E+01	0.9997	0.9969	0.9795	0.9478	0.9373	0.9358
18	0.51408E+01	0.9989	0.9904	0.9465	0.8924	0.8791	0.8773
19	0.62313E+01	0.9970	0.9736	0.8599	0.7255	0.6896	0.6848
20	0.12116E+02	0.9981	0.9836	0.9280	0.8851	0.8773	0.8764
21	0.15592E+02	0.9946	0.9568	0.8448	0.7815	0.7716	0.7704
22	0.31059E+02	0.9965	0.9739	0.9234	0.9032	0.9005	0.9002
23	0.42567E+02	0.9988	0.9921	0.9801	0.9767	0.9763	0.9762
24	0.10827E+03	0.9888	0.9392	0.8909	0.8612	0.8801	0.8801
25	0.47068E+03	0.9725	0.9093	0.8807	0.8767	0.8763	0.8762

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM242 MATNO = 7183
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 *					
		10000,	1000,	100,	10,	1,	0,
1	0.21235E+01	0.9999	0.9998	0.9998	0.9994	0.9989	0.9988
2	0.18588E+01	1.0003	1.0003	1.0003	1.0003	1.0004	1.0004
3	0.19854E+01	1.0000	1.0000	1.0000	1.0002	1.0005	1.0006
4	0.21144E+01	1.0000	1.0000	1.0000	1.0000	0.9999	1.0000
5	0.22252E+01	1.0000	1.0000	1.0000	0.9997	0.9995	0.9994
6	0.23754E+01	1.0000	1.0000	0.9999	0.9993	0.9985	0.9983
7	0.25454E+01	1.0000	1.0000	1.0000	0.9997	0.9995	0.9995
8	0.29334E+01	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
9	0.33996E+01	1.0000	1.0000	0.9999	0.9995	0.9992	0.9992
10	0.36728E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
11	0.44297E+01	1.0000	1.0000	0.9998	0.9993	0.9989	0.9989
12	0.74533E+01	1.0000	0.9997	0.9973	0.9891	0.9849	0.9841
13	0.10961E+02	1.0000	1.0000	0.9997	0.9990	0.9986	0.9985
14	0.13502E+02	1.0000	0.9999	0.9994	0.9980	0.9973	0.9972
15	0.15698E+02	1.0000	1.0001	0.9992	0.9975	0.9971	0.9970
16	0.25943E+02	0.9997	0.9973	0.9822	0.9542	0.9448	0.9435
17	0.30400E+02	0.9997	0.9969	0.9795	0.9478	0.9373	0.9358
18	0.51408E+02	0.9989	0.9904	0.9465	0.8924	0.8791	0.8773
19	0.62313E+02	0.9970	0.9736	0.8599	0.7255	0.6896	0.6848
20	0.12116E+03	0.9981	0.9836	0.9280	0.8851	0.8773	0.8764
21	0.15592E+03	0.9946	0.9568	0.8448	0.7815	0.7716	0.7704
22	0.31059E+03	0.9965	0.9739	0.9234	0.9032	0.9005	0.9002
23	0.42567E+03	0.9988	0.9921	0.9401	0.9767	0.9763	0.9762
24	0.89912E+03	0.9930	0.9608	0.9282	0.9216	0.9208	0.9209
25	0.24621E+04	0.9665	0.8907	0.8571	0.8526	0.8521	0.8521

NUCLID = AM242 MAT NUMBER = 7183

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.59246E+00	2.48216E-02		
2	4.12722E+00	2.29210E-02		
3	3.84269E+00	2.07563E-02		
4	3.29884E+00	1.75352E-02		
5	3.69355E+00	3.57809E-02		
6	6.40198E+00	6.72765E-02		
7	8.48776E+00	9.47638E-02		
8	9.55553E+00	1.09257E-01		
9	1.03814E+01	1.12080E-01		
10	1.09931E+01	1.21754E-01		
11	1.12866E+01	1.24878E-01		
12	1.14918E+01	1.27159E-01		
13	1.16423E+01	1.27308E-01		
14	1.17108E+01	1.28798E-01		
15	1.17429E+01	1.28989E-01		
16	1.17588E+01	1.28148E-01		
17	1.17648E+01	1.29191E-01		
18	1.17680E+01	1.29172E-01		
19	1.17705E+01	1.28232E-01		
20	1.17702E+01	1.29231E-01		
21	1.17705E+01	1.29191E-01		
22	1.17716E+01	1.28241E-01		
23	1.17707E+01	1.29231E-01		
24	1.17708E+01	1.29189E-01		
25	1.19000E+01	0.0		

NUCLID = AM242 MAT NUMBER = 7183
 TABLE OF INELASTIC (N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	J=	1	2	3	4						
1	1	2,76973E-02	4,68586E-02	9,63501E-02	3,38305E-01	3,96059E-01	5,79009E-01	3,80991E-01	1,51290E-01	5,73763E-02	1,73348E-02
	11	3,07943E-03									
2	0,0	3,74679E-02	2,54480E-01	3,80716E-01	3,56763E-01	1,65628E-01	5,58625E-02	1,70632E-02	6,19254E-02	1,02968E-01	
	0,0										
3	0,0	3,87222E-02	2,64277E-01	3,64412E-01	3,74571E-01	1,76147E-01	5,86560E-02	1,83165E-02	4,90804E-03	8,22551E-04	0,0
	0,0										
4	0,0	1,49499E-01	2,97076E-01	3,95349E-01	2,14638E-01	7,89284E-02	2,66744E-02	7,23291E-03	1,20446E-03	0,0	0,0
	0,0										
5	0,0	1,41784E-01	3,71147E-01	2,68944E-01	1,35531E-01	5,17667E-02	1,40236E-02	2,34221E-03	0,0	0,0	0,0
	0,0										
6	0,0	7,97249E-02	1,58434E-01	2,09067E-01	9,62104E-02	2,86485E-02	4,99327E-03	0,0	0,0	0,0	0,0
	0,0										
7	0,0	5,09287E-02	1,13999E-01	5,49111E-02	3,43991E-02	3,43011E-02	0,0	0,0	0,0	0,0	0,0
	0,0										
8	0,0	3,32567E-03	1,74144E-03	3,04370E-02	5,29593E-02	0,0	0,0	0,0	0,0	0,0	0,0
	0,0										

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NUCLID = AM243 MAT NO = 7184
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.54055E+00	1.76676E+00	4.20177E+00	3.01992E-03	3.39192E+00	4.06688E-01	9.72173E-01	8.67345E-01	2.11447E-02
2	7.22614E+00	1.41017E+00	3.68505E+00	4.18108E-03	4.00209E+00	1.80935E+00	3.39583E-04	6.25793E-01	2.21667E-02
3	7.06247E+00	1.52102E+00	3.36603E+00	6.03028E-03	3.70000E+00	1.83542E+00	0.0	7.35275E-01	2.23602E-02
4	7.03100E+00	1.52495E+00	3.14901E+00	1.61226E-02	3.42435E+00	2.06558E+00	0.0	6.50336E-01	1.79913E-02
5	7.93909E+00	1.13690E+00	3.01042E+00	3.88177E-02	4.26675E+00	2.49462E+00	0.0	5.77282E-01	3.94573E-02
6	8.60817E+00	1.53876E-01	2.93004E+00	8.06251E-02	6.28726E+00	2.06641E+00	0.0	3.46595E-01	6.37188E-02
7	9.18980E+00	2.17987E-02	2.86525E+00	1.59023E-01	8.52967E+00	4.79307E-01	0.0	2.34179E-01	9.04455E-02
8	1.01931E+01	1.27850E-02	2.83351E+00	2.06628E-01	9.91506E+00	5.85853E-02	0.0	1.41526E-01	1.15169E-01
9	1.08372E+01	2.01412E-02	2.82148E+00	2.54451E-01	1.05606E+01	2.00353E-03	0.0	6.03103E-02	1.10075E-01
10	1.11207E+01	3.52456E-02	2.81505E+00	4.68040E-01	1.06174E+01	0.0	0.0	2.20403E-02	1.12421E-01
11	1.13169E+01	6.16690E-02	2.81207E+00	7.87639E-01	1.04678E+01	0.0	0.0	6.44041E-03	1.12020E-01
12	1.38169E+01	8.63417E-02	2.81073E+00	1.55744E+00	1.21732E+01	0.0	0.0	2.76648E-03	1.73562E-01
13	2.12122E+01	1.03062E-01	2.81007E+00	1.91670E+00	1.91924E+01	0.0	0.0	2.76648E-03	2.31149E-01
14	2.53655E+01	1.41506E-01	2.80976E+00	2.24393E+00	2.29801E+01	0.0	0.0	2.76648E-03	2.60231E-01
15	2.78334E+01	1.15260E-01	2.80953E+00	2.98679E+00	2.47314E+01	0.0	0.0	2.76648E-03	2.72837E-01
16	3.66300E+01	1.53572E-01	2.80956E+00	1.09240E+01	2.55525E+01	0.0	0.0	2.76648E-03	2.76714E-01
17	6.10457E+01	2.52797E-01	2.80953E+00	3.33077E+01	2.74852E+01	0.0	0.0	2.76648E-03	2.51832E-01
18	6.04999E+01	4.13916E-01	2.80951E+00	3.63124E+01	2.37736E+01	0.0	0.0	2.76648E-03	2.34133E-01
19	8.70619E+01	5.20339E-01	2.80951E+00	6.25915E+01	2.39500E+01	0.0	0.0	2.76648E-03	2.34143E-01
20	1.45273E+02	5.50838E-01	2.80950E+00	1.18807E+02	2.59143E+01	0.0	0.0	2.76648E-03	2.15247E-01
21	1.88262E+02	5.86004E-01	2.80950E+00	1.62364E+02	2.53118E+01	0.0	0.0	2.76648E-03	2.23907E-01
22	1.01528E+02	6.21259E-01	2.80950E+00	7.76351E+01	2.32719E+01	0.0	0.0	2.76648E-03	2.76505E-01
23	1.83281E+03	6.58927E-01	2.80950E+00	1.77022E+03	6.19335E+01	0.0	0.0	2.76648E-03	1.79141E-01
24	1.16494E+02	6.99684E-01	2.80950E+00	1.00970E+02	1.48242E+01	0.0	0.0	2.76648E-03	1.48360E-01
25	4.97865E+01	7.44884E-01	2.80950E+00	3.62460E+01	1.27956E+01	0.0	0.0	6.12961E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM243 MATNO = 7184
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	0.9999	0.9998	0.9986	0.9768	0.9963
2	0.9997	0.9997	0.9997	0.9996	0.9995	0.9994
3	1.0000	1.0000	1.0000	0.9999	0.9997	0.9997
4	1.0000	1.0000	0.9999	0.9993	0.9986	0.9984
5	1.0000	1.0000	0.9999	0.9993	0.9987	0.9985
6	1.0000	1.0000	0.9999	0.9994	0.9988	0.9987
7	1.0000	1.0000	0.9999	0.9994	0.9989	0.9988
8	1.0000	1.0000	0.9998	0.9990	0.9982	0.9980
9	0.9998	0.9998	0.9998	0.9997	0.9997	0.9997
10	0.9999	0.9999	0.9999	0.9998	0.9996	0.9997
11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.9999	0.9994	0.9948	0.9747	0.9603	0.9576
13	1.0000	0.9998	0.9981	0.9925	0.9893	0.9888
14	1.0000	0.9999	0.9996	0.9985	0.9979	0.9979
15	1.0000	1.0000	0.9998	0.9993	0.9991	0.9991
16	0.9997	0.9970	0.9780	0.9369	0.9237	0.9219
17	0.9907	0.9139	0.7157	0.5573	0.5186	0.5136
18	0.9916	0.9111	0.6688	0.5158	0.4881	0.4647
19	0.9784	0.8188	0.5036	0.3793	0.3607	0.3585
20	0.9077	0.5959	0.3252	0.2451	0.2326	0.2311
21	0.8599	0.4789	0.2587	0.2042	0.1959	0.1949
22	0.9082	0.6091	0.4199	0.3636	0.3530	0.3517
23	0.4899	0.2005	0.0936	0.0636	0.0597	0.0592
24	0.9869	0.9022	0.7389	0.6588	0.6447	0.6430
25	0.9997	0.9957	0.9924	0.9819	0.9790	0.9786

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM243 MATNO = 7184

REACTION = ELASTIC

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.33919E+01	1.0002	1.0001	1.0000	0.9989	0.9972	0.9968
2	0.40021E+01	1.0006	1.0007	1.0006	1.0004	1.0005	1.0005
3	0.37000E+01	1.0000	1.0000	1.0000	0.9997	0.9994	0.9993
4	0.34244E+01	1.0000	1.0000	1.0000	0.9999	0.9994	0.9994
5	0.42668E+01	1.0000	1.0000	0.9998	0.9987	0.9979	0.9976
6	0.62873E+01	1.0000	1.0000	0.9997	0.9989	0.9976	0.9973
7	0.85297E+01	1.0000	1.0000	0.9999	0.9991	0.9986	0.9984
8	0.99151E+01	1.0000	1.0000	0.9999	0.9994	0.9988	0.9987
9	0.10561E+02	1.0000	1.0000	1.0000	0.9999	0.9997	0.9997
10	0.10617E+02	1.0000	1.0000	1.0000	0.9999	0.9999	1.0000
11	0.10468E+02	1.0000	1.0000	1.0000	0.9997	0.9999	1.0000
12	0.12173E+02	0.9998	0.9995	0.9969	0.9854	0.9773	0.9757
13	0.19192E+02	1.0000	0.9999	0.9989	0.9961	0.9944	0.9940
14	0.22980E+02	1.0000	1.0000	0.9997	0.9992	0.9990	0.9989
15	0.24731E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
16	0.25552E+02	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989
17	0.27485E+02	0.9966	0.9768	0.9233	0.8829	0.8725	0.8711
18	0.23774E+02	0.9985	0.9906	0.9641	0.9439	0.9395	0.9390
19	0.23950E+02	0.9978	0.9858	0.9547	0.9364	0.9329	0.9325
20	0.25914E+02	0.9861	0.9342	0.8814	0.8652	0.8627	0.8623
21	0.25312E+02	0.9842	0.9303	0.8801	0.8619	0.8586	0.8581
22	0.23272E+02	0.9984	0.9921	0.9845	0.9800	0.9787	0.9785
23	0.61934E+02	0.7565	0.5357	0.4590	0.4473	0.4461	0.4459
24	0.14824E+02	0.9996	0.9971	0.9893	0.9833	0.9821	0.9820
25	0.12796E+02	1.0004	0.9999	0.9989	0.9969	0.9964	0.9963

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM243 MATNO = 7184

REACTION = CAPTURE

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.30199E-02	0.9998	0.9998	0.9995	0.9980	0.9951	0.9943
2	0.41811E-02	1.0003	1.0003	1.0003	1.0000	0.9996	0.9996
3	0.60303E-02	1.0000	1.0000	1.0002	1.0015	1.0031	1.0035
4	0.16123E-01	1.0012	1.0012	1.0009	0.9990	0.9960	0.9955
5	0.38818E-01	1.0001	1.0001	0.9996	0.9974	0.9944	0.9936
6	0.80625E-01	1.0000	1.0000	0.9994	0.9961	0.9928	0.9919
7	0.15902E+00	1.0000	0.9999	0.9997	0.9984	0.9970	0.9967
8	0.20663E+00	0.9999	0.9999	0.9998	0.9992	0.9987	0.9986
9	0.25445E+00	1.0002	1.0002	1.0004	1.0003	1.0006	1.0006
10	0.46804E+00	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
11	0.78764E+00	1.0002	1.0002	1.0001	0.9998	0.9996	0.9994
12	0.15574E+01	0.9998	0.9996	0.9974	0.9885	0.9815	0.9802
13	0.19167E+01	0.9993	0.9993	0.9996	0.9989	0.9983	0.9982
14	0.22439E+01	1.0001	1.0000	0.9996	0.9984	0.9979	0.9977
15	0.29868E+01	1.0001	1.0000	0.9999	0.9987	0.9982	0.9981
16	0.10924E+02	0.9994	0.9944	0.9567	0.8841	0.8587	0.8552
17	0.33308E+02	0.9911	0.9295	0.7233	0.5295	0.4783	0.4714
18	0.36312E+02	0.9910	0.9248	0.6720	0.4462	0.3950	0.3884
19	0.62592E+02	0.9821	0.8632	0.5360	0.3325	0.2939	0.2891
20	0.11881E+03	0.9411	0.6942	0.3616	0.2217	0.1972	0.1942
21	0.16236E+03	0.9132	0.5988	0.2867	0.1834	0.1668	0.1648
22	0.77635E+02	0.9347	0.6622	0.3618	0.2582	0.2404	0.2382
23	0.17702E+04	0.6630	0.3316	0.1798	0.1360	0.1295	0.1287
24	0.10097E+03	0.9918	0.9375	0.8017	0.7260	0.7127	0.7111
25	0.36246E+02	0.9999	0.9994	0.9954	0.9884	0.9865	0.9862

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = AM243 MATNO = 7184
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.17668E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998
2	0.14102E+01	0.9999	1.0000	1.0000	1.0001	1.0004	1.0004
3	0.15210E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.15250E+01	0.9999	0.9999	0.9998	0.9998	0.9998	1.0000
5	0.11389E+01	1.0000	1.0000	1.0006	1.0024	1.0050	1.0057
6	0.15388E+00	1.0000	1.0002	1.0019	1.0112	1.0217	1.0242
7	0.21799E+01	1.0000	1.0001	1.0007	1.0047	1.0079	1.0086
8	0.12785E+01	1.0000	1.0000	0.9996	0.9981	0.9969	0.9966
9	0.20141E+01	1.0000	1.0000	1.0001	1.0003	1.0007	1.0007
10	0.35246E+01	1.0000	1.0000	0.9999	0.9992	0.9987	0.9986
11	0.61669E+01	1.0000	1.0000	0.9999	0.9996	0.9992	0.9992
12	0.86342E+01	0.9998	0.9999	0.9993	0.9965	0.9944	0.9940
13	0.10306E+00	1.0000	0.9999	0.9989	0.9957	0.9940	0.9937
14	0.14151E+00	0.9999	0.9998	1.0000	0.9994	0.9991	0.9991
15	0.11526E+00	1.0001	1.0001	1.0004	1.0012	1.0016	1.0017
16	0.15357E+00	0.9999	0.9988	0.9921	0.9777	0.9727	0.9721
17	0.25280E+00	0.9993	0.9992	1.0026	1.0164	1.0221	1.0230
18	0.41392E+00	0.9995	0.9997	0.9999	0.9999	0.9995	0.9995
19	0.52034E+00	0.9999	1.0002	1.0002	1.0001	1.0000	1.0000
20	0.55084E+00	0.9999	0.9999	0.9993	0.9981	0.9977	0.9977
21	0.58600E+00	0.9997	1.0001	1.0005	1.0011	1.0013	1.0013
22	0.62126E+00	0.9998	1.0002	1.0007	1.0001	0.9998	0.9997
23	0.65893E+00	0.9998	0.9987	0.9941	0.9901	0.9893	0.9892
24	0.69968E+00	1.0005	1.0012	1.0041	1.0065	1.0070	1.0070
25	0.74488E+00	1.0002	1.0007	1.0012	1.0019	1.0022	1.0022

NUCLID = AM243 MAT NUMBER = 7184

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP	** KK **		KK = I + J - 1
		I	J	
1	1	1	2	
1	3.37077E+00	2.11448E-02		
2	3.97993E+00	2.21666E-02		
3	3.67764E+00	2.23602E-02		
4	3.40636E+00	1.79913E-02		
5	4.22730E+00	3.94572E-02		
6	6.22354E+00	6.37188E-02		
7	8.43922E+00	9.04454E-02		
8	9.74989E+00	1.15169E-01		
9	1.04505E+01	1.10075E-01		
10	1.05050E+01	1.12421E-01		
11	1.03555E+01	1.12020E-01		
12	1.19996E+01	1.73562E-01		
13	1.89613E+01	2.31149E-01		
14	2.27199E+01	2.60231E-01		
15	2.44585E+01	2.72837E-01		
16	2.52758E+01	2.76715E-01		
17	2.72334E+01	2.51832E-01		
18	2.35395E+01	2.34133E-01		
19	2.37159E+01	2.34143E-01		
20	2.56991E+01	2.15248E-01		
21	2.50879E+01	2.23908E-01		
22	2.29954E+01	2.76506E-01		
23	6.17544E+01	1.79141E-01		
24	1.46759E+01	1.48359E-01		
25	1.27956E+01	0.0		

NUCLID = AM243 MAT NUMBER = 7184

TABLE OF INELA*(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
I	J		2	3							
			12	13							
1		3.82579E-04	6.54918E-03	2.93571E-02	1.41098E-01	3.19315E-01	6.52188E-01	6.35479E-01	3.63720E-01	1.52627E-01	4.29969E-02
		7.52388E-03	0.0	0.0							
2		0.0	6.10919E-02	3.51694E-01	5.22338E-01	5.24063E-01	2.42749E-01	7.73695E-02	2.36320E-02	5.52934E-03	8.79965E-04
		0.0	2.45349E-04	4.33817E-04							
3		4.91342E-02	3.56857E-01	5.20067E-01	5.37649E-01	2.52957E-01	8.42053E-02	2.63043E-02	7.06330E-03	1.18463E-03	0.0
		0.0	0.0	0.0							
4		2.27421E-01	5.40883E-01	7.05117E-01	3.85736E-01	1.42766E-01	4.84097E-02	1.30711E-02	2.17220E-03	0.0	0.0
		0.0	0.0	0.0							
5		3.57026E-01	9.32407E-01	7.22427E-01	3.26500E-01	1.19649E-01	3.14326E-02	5.18009E-03	0.0	0.0	0.0
		0.0	0.0	0.0							
6		3.17575E-01	8.94746E-01	5.38528E-01	2.45335E-01	7.65074E-02	1.37190E-02	0.0	0.0	0.0	0.0
		0.0	0.0	0.0							
7		7.12034E-02	1.32919E-01	1.48437E-01	8.57577E-02	4.09904E-02	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0							
8		1.54265E-03	2.20160E-03	2.03970E-02	3.44444E-02	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0							
9		4.24683E-06	7.23369E-04	1.27591E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0							

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NUCLID = CM242 MAT NO = 7185
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL	
1	6.71492E+00	1.89279E+00	4.64357E+00	7.53967E-03	3.44992E+00	8.43416E-01	5.21245E-01	8.45804E-01	2.37269E-02
2	7.30677E+00	1.61342E+00	4.10343E+00	1.42413E-02	3.98224E+00	1.69687E+00	0.0	8.22561E-01	2.14215E-02
3	7.03564E+00	1.72407E+00	3.79641E+00	3.47923E-02	3.63995E+00	1.63682E+00	0.0	7.60311E-01	2.01404E-02
4	7.04938E+00	1.74794E+00	3.58718E+00	6.96773E-02	3.45855E+00	1.77321E+00	0.0	6.60280E-01	1.94492E-02
5	8.12047E+00	1.62614E+00	3.44989E+00	1.45125E-01	4.41577E+00	1.93343E+00	0.0	5.88409E-01	3.82829E-02
6	8.62484E+00	7.65498E-01	3.37063E+00	1.45977E-01	6.01468E+00	1.69868E+00	0.0	3.49801E-01	5.81895E-02
7	8.24102E+00	1.26003E-01	3.31463E+00	1.80859E-01	7.19864E+00	7.33522E-01	0.0	2.06878E-01	7.78488E-02
8	1.06264E+01	8.11013E-02	3.28796E+00	2.33655E-01	1.01011E+01	2.10585E-01	0.0	1.12996E-01	1.31819E-01
9	1.36093E+01	8.00121E-02	3.27268E+00	4.11768E-01	1.30723E+01	4.52000E-02	0.0	8.06445E-02	1.44744E-01
10	1.58144E+01	9.25016E-02	3.26662E+00	7.15389E-01	1.50065E+01	5.76237E-05	0.0	7.09526E-03	1.71874E-01
11	1.69990E+01	9.82968E-02	3.26433E+00	9.30562E-01	1.59701E+01	0.0	0.0	2.77859E-03	1.50487E-01
12	1.38110E+01	1.00000E-01	3.26320E+00	1.07258E+00	1.26385E+01	0.0	0.0	2.77859E-03	1.67840E-01
13	1.95350E+01	1.00000E-01	3.26256E+00	1.16682E+00	1.82682E+01	0.0	0.0	2.77859E-03	2.19589E-01
14	2.31404E+01	1.25243E-01	3.26224E+00	1.35063E+00	2.16645E+01	0.0	0.0	2.77859E-03	2.45855E-01
15	3.23359E+01	3.32045E-01	3.26210E+00	1.56975E+00	3.04341E+01	0.0	0.0	2.77859E-03	3.48465E-01
16	4.02024E+01	5.83790E-01	3.26206E+00	2.59426E+00	3.70243E+01	0.0	0.0	2.77859E-03	2.24552E-01
17	3.04844E+01	7.21479E-01	3.26203E+00	3.03999E+00	2.67229E+01	0.0	0.0	2.77859E-03	2.50535E-01
18	3.62553E+01	4.38282E-01	3.26201E+00	5.14081E+00	3.06762E+01	0.0	0.0	2.77859E-03	2.35093E-01
19	3.24759E+01	4.87983E-01	3.26201E+00	6.23127E+00	2.57567E+01	0.0	0.0	2.77859E-03	2.34140E-01
20	3.86673E+01	3.39090E-01	3.26200E+00	1.21159E+01	2.62123E+01	0.0	0.0	2.77859E-03	3.25878E-01
21	2.59821E+02	3.33056E+01	3.26200E+00	1.55925E+01	2.10923E+02	0.0	0.0	2.77859E-03	1.79195E-01
22	4.65509E+01	4.55591E-01	3.26200E+00	3.10586E+01	1.50367E+01	0.0	0.0	2.77859E-03	1.38525E-01
23	5.67668E+01	6.60986E-01	3.26200E+00	4.25672E+01	1.35386E+01	0.0	0.0	2.77859E-03	1.52689E-01
24	1.23526E+02	9.65976E-01	3.26200E+00	1.08267E+02	1.42931E+01	0.0	0.0	2.77859E-03	1.48053E-01
25	1.38808E+02	1.42016E+00	3.26200E+00	1.24646E+02	1.27421E+01	0.0	0.0	6.16249E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM242 MATNO = 7185
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9988	0.9968	0.9963
2	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
3	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
4	0.9999	0.9999	0.9998	0.9994	0.9987	0.9985
5	1.0000	1.0000	0.9997	0.9984	0.9968	0.9965
6	0.9997	0.9998	0.9997	0.9995	0.9992	0.9992
7	0.9999	0.9998	0.9998	0.9998	0.9998	0.9998
8	1.0000	0.9997	0.9977	0.9874	0.9777	0.9756
9	1.0000	0.9999	0.9995	0.9978	0.9965	0.9962
10	1.0000	1.0000	0.9996	0.9982	0.9973	0.9971
11	0.9999	0.9998	0.9995	0.9980	0.9970	0.9968
12	0.9996	0.9994	0.9975	0.9895	0.9836	0.9824
13	1.0000	0.9998	0.9964	0.9933	0.9903	0.9898
14	1.0000	1.0000	0.9997	0.9987	0.9982	0.9981
15	0.9994	0.9639	0.8533	0.8073	0.7497	0.7987
16	0.9767	0.8385	0.6741	0.6103	0.5953	0.5931
17	0.9677	0.9170	0.8292	0.7455	0.7869	0.7857
18	0.9642	0.8400	0.7598	0.7278	0.7180	0.7165
19	0.9997	0.9767	0.9152	0.8721	0.8612	0.8597
20	0.9992	0.9919	0.9617	0.9340	0.9268	0.9258
21	0.5713	0.2545	0.1775	0.1547	0.1503	0.1497
22	0.9998	0.9976	0.9665	0.9087	0.8903	0.8878
23	0.9998	0.9985	0.9902	0.9764	0.9725	0.9719
24	0.9966	0.9672	0.8563	0.7865	0.7755	0.7742
25	0.9970	0.9726	0.8876	0.8385	0.8311	0.8302

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM242 MATNO = 7185

REACTION = ELASTIC

TEMPERATURE = 300. K

GROUP	INFINITE DILU.		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.34499E+01	0.9999	0.9999	0.9997	0.9985	0.9967	0.9962
2	0.39822E+01	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999
3	0.36400E+01	0.9999	0.9999	0.9998	0.9996	0.9992	0.9991
4	0.34586E+01	1.0000	1.0000	1.0000	0.9996	0.9993	0.9992
5	0.44158E+01	1.0000	1.0000	0.9996	0.9980	0.9965	0.9958
6	0.60147E+01	1.0000	1.0000	1.0000	1.0004	1.0009	1.0011
7	0.71986E+01	0.9998	0.9998	0.9998	1.0000	1.0000	1.0000
8	0.10101E+02	1.0000	0.9998	0.9986	0.9924	0.9864	0.9847
9	0.13072E+02	1.0000	1.0000	0.9998	0.9988	0.9983	0.9982
10	0.15006E+02	1.0000	1.0000	0.9996	0.9990	0.9988	0.9986
11	0.15970E+02	1.0000	1.0000	0.9997	0.9990	0.9985	0.9984
12	0.12638E+02	1.0000	0.9993	0.9985	0.9931	0.9891	0.9882
13	0.18268E+02	1.0000	0.9999	0.9991	0.9963	0.9949	0.9946
14	0.21664E+02	0.9999	0.9999	0.9998	0.9993	0.9992	0.9992
15	0.30434E+02	0.9949	0.9627	0.8774	0.8225	0.8116	0.8103
16	0.37024E+02	0.9824	0.8899	0.7251	0.6418	0.6247	0.6224
17	0.26723E+02	0.9918	0.9434	0.8514	0.8061	0.7968	0.7956
18	0.30676E+02	0.9764	0.8731	0.7585	0.7175	0.7094	0.7084
19	0.25757E+02	0.9989	0.9839	0.9382	0.9054	0.8987	0.8979
20	0.26212E+02	0.9995	0.9941	0.9732	0.9545	0.9504	0.9498
21	0.21092E+03	0.7188	0.3381	0.1783	0.1369	0.1303	0.1295
22	0.15037E+02	1.0000	0.9992	0.9929	0.9802	0.9759	0.9753
23	0.13539E+02	1.0003	1.0002	0.9995	0.9980	0.9977	0.9976
24	0.14293E+02	1.0002	1.0006	1.0022	1.0028	1.0028	1.0028
25	0.12742E+02	0.9999	0.9984	0.9935	0.9902	0.9897	0.9896

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM242 MATNO = 7185

REACTION = CAPTURE

TEMPERATURE = 300. K

GROUP	INFINITE DILU.		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.75397E-02	0.9998	0.9998	0.9995	0.9977	0.9951	0.9944
2	0.14241E-01	1.0000	1.0000	1.0000	0.9996	0.9992	0.9990
3	0.34792E-01	1.0000	1.0000	1.0003	1.0012	1.0023	1.0026
4	0.69677E-01	1.0010	1.0009	1.0003	0.9973	0.9929	0.9919
5	0.14512E+00	1.0000	1.0000	0.9997	0.9981	0.9965	0.9960
6	0.14598E+00	1.0000	1.0000	0.9997	0.9997	0.9995	0.9994
7	0.18086E+00	1.0003	1.0003	1.0004	1.0003	1.0003	1.0004
8	0.23366E+00	1.0000	0.9999	0.9995	0.9973	0.9957	0.9954
9	0.41177E+00	1.0000	0.9998	0.9986	0.9939	0.9902	0.9894
10	0.71539E+00	1.0001	1.0000	0.9995	0.9974	0.9961	0.9958
11	0.93056E+00	1.0000	1.0000	1.0001	1.0006	1.0008	1.0009
12	0.10726E+01	0.9999	0.9999	0.9999	0.9990	0.9986	0.9987
13	0.11668E+01	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989
14	0.13506E+01	1.0000	0.9999	0.9996	0.9984	0.9978	0.9977
15	0.15698E+01	0.9996	0.9992	0.9968	0.9950	0.9948	0.9948
16	0.25943E+01	0.9998	1.0003	0.9987	0.9918	0.9881	0.9875
17	0.30400E+01	0.9999	0.9997	0.9973	0.9907	0.9877	0.9872
18	0.51408E+01	1.0001	1.0004	0.9962	0.9793	0.9708	0.9695
19	0.62313E+01	0.9995	0.9952	0.9703	0.9210	0.9023	0.8995
20	0.12116E+02	0.9997	0.9979	0.9865	0.9656	0.9586	0.9576
21	0.15592E+02	1.0076	1.0266	1.0578	1.0718	1.0719	1.0717
22	0.31059E+02	0.9996	0.9965	0.9754	0.9368	0.9244	0.9227
23	0.42567E+02	1.0000	0.9990	0.9928	0.9831	0.9804	0.9800
24	0.10827E+03	0.9977	0.9797	0.9083	0.8556	0.8465	0.8454
25	0.12465E+03	0.9982	0.9842	0.9313	0.8965	0.8908	0.8901

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM242 MATNO = 7185
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X=SECTION	SIGMA 0					
		10000.	1000.	100.	10.	1.	0.
1	0.18928E+01	0.9998	0.9998	0.9998	0.9998	0.9996	0.9996
2	0.16134E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0002
3	0.17241E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0002
4	0.17479E+01	1.0001	1.0001	1.0000	0.9998	1.0001	1.0002
5	0.16261E+01	1.0000	1.0000	1.0002	1.0011	1.0022	1.0025
6	0.76550E+00	1.0000	0.9999	0.9994	0.9965	0.9931	0.9924
7	0.12800E+00	1.0000	1.0000	1.0000	0.9997	0.9993	0.9992
8	0.81101E-01	1.0000	1.0001	1.0010	1.0054	1.0096	1.0105
9	0.80012E-01	0.9999	0.9998	0.9995	0.9983	0.9972	0.9970
10	0.92502E-01	0.9998	1.0000	0.9997	0.9995	0.9992	0.9992
11	0.98297E-01	1.0000	1.0001	1.0002	1.0002	1.0003	1.0003
12	0.10000E+00	1.0000	0.9999	1.0000	1.0000	1.0000	1.0000
13	0.10000E+00	1.0000	1.0000	1.0000	1.0001	1.0001	1.0001
14	0.12524E+00	1.0000	0.9999	0.9992	0.9972	0.9961	0.9960
15	0.33204E+00	0.9912	0.9334	0.7747	0.6789	0.6621	0.6600
16	0.58379E+00	0.9833	0.8844	0.6454	0.4954	0.4666	0.4630
17	0.72148E+00	0.9903	0.9348	0.8158	0.7477	0.7340	0.7322
18	0.43828E+00	0.9879	0.9334	0.8403	0.7575	0.7328	0.7293
19	0.48798E+00	0.9933	0.9415	0.7660	0.6251	0.5937	0.5896
20	0.33909E+00	0.9952	0.9557	0.7912	0.6589	0.6344	0.6314
21	0.33306E+02	0.6940	0.2819	0.1145	0.0761	0.0707	0.0701
22	0.45558E+00	1.0003	1.0008	1.0044	1.0119	1.0144	1.0148
23	0.66099E+00	0.9999	0.9993	0.9955	0.9892	0.9875	0.9873
24	0.96598E+00	0.9996	0.9953	0.9781	0.9646	0.9620	0.9617
25	0.14202E+01	1.0005	1.0042	1.0188	1.0296	1.0314	1.0316

NUCLID = CM242 MAT NUMBER = 7185

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP		** KK **	KK = I + J - 1
	J= 1	2		
1	3.42620E+00	2.37269E-02		
2	3.96081E+00	2.14215E-02		
3	3.61981E+00	2.01404E-02		
4	3.43910E+00	1.94492E-02		
5	4.37749E+00	3.82829E-02		
6	5.95649E+00	5.81895E-02		
7	7.12079E+00	7.78488E-02		
8	9.96925E+00	1.31819E-01		
9	1.29276E+01	1.44744E-01		
10	1.48346E+01	1.71874E-01		
11	1.56197E+01	1.50487E-01		
12	1.24706E+01	1.67840E-01		
13	1.80486E+01	2.19589E-01		
14	2.14186E+01	2.45855E-01		
15	3.00856E+01	3.48466E-01		
16	3.67998E+01	2.24552E-01		
17	2.64724E+01	2.50535E-01		
18	3.04411E+01	2.35094E-01		
19	2.55225E+01	2.34140E-01		
20	2.58864E+01	3.25878E-01		
21	2.10744E+02	1.79200E-01		
22	1.48982E+01	1.36525E-01		
23	1.33859E+01	1.52688E-01		
24	1.41451E+01	1.48052E-01		
25	1.27421E+01	0.0		

NUCLID = CM242 MAT NUMBER = 7185

TABLE OF INELA+(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	J=	1	2	3	4						
1	11	1.18083E-03	1.35533E-02	6.29088E-02	2.50489E-01	3.44944E-01	3.36002E-01	1.91911E-01	7.82860E-02	2.67723E-02	2.13527E-01
		3.66332E-01									
2		0.0	5.77840E-02	3.29691E-01	4.89701E-01	4.91383E-01	2.27620E-01	7.25331E-02	2.21541E-02	5.18353E-03	8.24931E-04
		0.0									
3		4.86168E-02	3.32659E-01	4.58389E-01	4.71367E-01	2.21702E-01	7.38176E-02	2.30537E-02	6.18189E-03	1.03630E-03	0.0
		0.0									
4		2.29750E-01	4.48837E-01	5.72702E-01	3.37154E-01	1.26448E-01	4.36189E-02	1.08960E-02	1.80589E-03	0.0	0.0
		0.0									
5		2.38907E-01	7.64663E-01	5.56094E-01	2.54805E-01	9.14001E-02	2.38438E-02	3.92013E-03	0.0	0.0	0.0
		0.0									
6		3.73023E-01	6.92158E-01	3.94619E-01	1.79231E-01	5.09306E-02	8.72090E-03	0.0	0.0	0.0	0.0
		0.0									
7		1.17207E-01	2.75835E-01	2.45096E-01	8.07241E-02	1.46611E-02	0.0	0.0	0.0	0.0	0.0
		0.0									
8		1.81018E-02	2.06106E-02	6.60691E-02	1.05804E-01	0.0	0.0	0.0	0.0	0.0	0.0
		0.0									
9		4.89372E-04	1.62568E-02	2.84538E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0									
10		0.0	0.0	0.0	2.08166E-05	3.68072E-05	0.0	0.0	0.0	0.0	0.0
		0.0									

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NUCLID = CM243 MAT NO = 7186
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA.	N2H	EL MU	EL REMOVAL
1	6.62972E+00	2.07984E+00	4.75522E+00	3.77593E-03	3.39192E+00	3.84538E-01	7.69650E-01	8.05379E-01	2.13722E-02
2	7.30141E+00	1.86395E+00	4.30053E+00	4.49407E-03	4.00209E+00	1.37040E+00	6.04736E-02	8.25764E-01	2.20752E-02
3	7.07987E+00	1.99953E+00	3.98229E+00	6.07164E-03	3.70000E+00	1.37426E+00	0.0	7.35374E-01	2.23978E-02
4	7.03081E+00	2.13341E+00	3.76879E+00	1.61226E-02	3.42435E+00	1.45692E+00	0.0	6.49148E-01	1.80848E-02
5	8.24387E+00	1.96893E+00	3.62573E+00	3.69671E-02	4.26675E+00	1.97122E+00	0.0	5.75488E-01	3.94635E-02
6	1.03033E+01	1.87429E+00	3.53569E+00	7.67474E-02	5.28726E+00	2.06997E+00	0.0	3.46595E-01	6.37240E-02
7	1.25429E+01	1.85501E+00	3.48358E+00	1.59023E-01	8.52967E+00	2.00524E+00	0.0	2.34180E-01	9.04529E-02
8	1.34623E+01	1.95532E+00	3.45756E+00	2.06628E-01	9.79767E+00	1.50868E+00	0.0	1.41856E-01	1.10280E-01
9	1.32354E+01	2.25375E+00	3.44459E+00	2.85188E-01	1.04642E+01	2.32198E-01	0.0	3.99548E-02	1.11733E-01
10	1.40879E+01	2.83745E+00	3.43854E+00	4.51306E-01	1.07992E+01	0.0	0.0	2.20161E-02	1.15695E-01
11	1.53300E+01	3.57452E+00	3.43550E+00	6.00845E-01	1.09546E+01	0.0	0.0	6.40877E-03	1.18939E-01
12	1.70355E+01	4.53099E+00	3.43412E+00	1.58548E+00	1.11491E+01	0.0	0.0	2.76671E-03	1.21788E-01
13	1.87963E+01	5.14494E+00	3.43346E+00	2.31342E+00	1.13379E+01	0.0	0.0	2.76671E-03	1.22245E-01
14	2.20343E+01	7.94767E+00	3.43316E+00	2.65114E+00	1.14255E+01	0.0	0.0	2.76671E-03	1.23821E-01
15	2.71718E+01	1.27546E+01	3.43302E+00	2.95094E+00	1.14660E+01	0.0	0.0	2.76671E-03	1.24072E-01
16	3.50207E+01	2.03346E+01	3.43296E+00	3.20116E+00	1.14849E+01	0.0	0.0	2.76671E-03	1.24312E-01
17	4.73297E+01	3.28460E+01	3.43293E+00	3.49000E+00	1.14937E+01	0.0	0.0	2.76671E-03	1.24300E-01
18	6.69878E+01	7.05619E+01	3.43291E+00	4.92817E+00	1.14977E+01	0.0	0.0	2.76671E-03	2.41871E-01
19	8.30067E+01	6.39161E+01	3.43291E+00	7.23187E+00	1.14977E+01	0.0	0.0	2.76671E-03	2.42694E-01
20	7.48417E+01	3.94030E+01	3.43290E+00	1.00790E+01	2.53597E+01	0.0	0.0	2.76671E-03	2.41768E-01
21	2.42170E+02	1.92350E+02	3.43290E+00	2.66474E+01	2.31729E+01	0.0	0.0	2.76671E-03	2.41360E-01
22	2.56070E+02	2.07370E+02	3.43290E+00	2.82590E+01	2.24404E+01	0.0	0.0	2.76671E-03	2.41360E-01
23	2.75868E+02	2.14082E+02	3.43290E+00	3.54001E+01	2.37858E+01	0.0	0.0	2.76671E-03	1.84815E-01
24	1.86767E+02	1.33954E+02	3.43290E+00	3.39980E+01	1.88144E+01	0.0	0.0	2.76671E-03	0.0
25	2.77198E+02	1.96977E+02	3.43229E+00	6.74741E+01	1.48474E+01	0.0	0.0	5.92178E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM243 MATNO = 7186
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA C =					0.9976	0.9972
	10000.	1000.	100.	10.	1.		
1	1.0000	1.0000	0.9998	0.9990	0.9990	0.9976	0.9972
2	1.0000	1.0000	1.0000	0.9999	0.9999	0.9996	0.9997
3	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997	0.9996
4	0.9998	0.9998	0.9998	0.9996	0.9996	0.9994	0.9993
5	1.0000	1.0000	0.9996	0.9974	0.9974	0.9949	0.9943
6	1.0000	0.9999	0.9942	0.9957	0.9957	0.9922	0.9914
7	1.0000	1.0000	0.9997	0.9984	0.9984	0.9974	0.9972
8	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999
9	0.9999	0.9999	0.9998	0.9997	0.9997	0.9997	0.9996
10	1.0000	1.0000	0.9999	0.9994	0.9994	0.9989	0.9990
11	1.0000	1.0000	0.9998	0.9993	0.9993	0.9989	0.9988
12	1.0000	1.0000	0.9997	0.9988	0.9988	0.9982	0.9981
13	1.0000	1.0000	0.9997	0.9988	0.9988	0.9982	0.9981
14	0.9999	0.9998	0.9990	0.9962	0.9962	0.9947	0.9944
15	1.0000	0.9998	0.9981	0.9938	0.9938	0.9917	0.9914
16	1.0000	0.9996	0.9968	0.9903	0.9903	0.9879	0.9875
17	0.9999	0.9985	0.9898	0.9783	0.9783	0.9752	0.9748
18	0.9904	0.9123	0.6743	0.4965	0.4965	0.4576	0.4525
19	0.9911	0.9243	0.7290	0.5822	0.5822	0.5472	0.5426
20	0.9962	0.9230	0.9328	0.6902	0.6902	0.6606	0.6794
21	0.9236	0.6598	0.4720	0.4336	0.4336	0.4289	0.4284
22	0.9619	0.8180	0.6958	0.6686	0.6686	0.6654	0.6650
23	0.9852	0.8966	0.7502	0.7073	0.7073	0.7021	0.7016
24	0.9996	0.9962	0.9831	0.9753	0.9753	0.9741	0.9739
25	0.9993	0.9946	0.9810	0.9747	0.9747	0.9739	0.9738

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM243 MATNO = 7186
 REACTION = ELASTIC
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.33919E+01	0.9999	0.9998	0.9997	0.9986	0.9971	0.9966
2	0.40021E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
3	0.37000E+01	1.0000	1.0000	0.9999	0.9997	0.9993	0.9993
4	0.34244E+01	1.0000	1.0000	0.9999	0.9999	0.9998	0.9998
5	0.42668E+01	1.0000	1.0000	0.9996	0.9977	0.9951	0.9945
6	0.62873E+01	1.0000	0.9999	0.9992	0.9964	0.9929	0.9922
7	0.85297E+01	1.0000	1.0000	0.9998	0.9987	0.9979	0.9977
8	0.97977E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
9	0.10464E+02	1.0000	0.9999	1.0000	1.0001	1.0000	1.0001
10	0.10799E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.10955E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.11149E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0001
13	0.11338E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
14	0.11426E+02	1.0000	1.0000	0.9999	0.9996	0.9995	0.9995
15	0.11466E+02	1.0000	1.0000	0.9998	0.9996	0.9996	0.9995
16	0.11485E+02	1.0000	1.0000	0.9997	0.9995	0.9995	0.9995
17	0.11494E+02	1.0000	0.9999	0.9998	0.9997	0.9997	0.9997
18	0.11498E+02	0.9990	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.12659E+02	0.9984	0.9978	0.9884	0.9747	0.9707	0.9702
20	0.25360E+02	0.9998	1.0000	1.0011	1.0032	1.0041	1.0042
21	0.23173E+02	0.9990	0.9941	0.9829	0.9773	0.9764	0.9763
22	0.22440E+02	0.9984	0.9883	0.9653	0.9562	0.9550	0.9548
23	0.23786E+02	0.9983	0.9859	0.9480	0.9291	0.9264	0.9261
24	0.18814E+02	1.0003	1.0006	1.0017	1.0027	1.0028	1.0028
25	0.14847E+02	1.0005	1.0021	1.0067	1.0086	1.0089	1.0089

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM243 MATNO = 7186
 REACTION = CAPTURE
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.37759E-02	0.9999	0.9998	0.9997	0.9987	0.9974	0.9970
2	0.44941E-02	0.9997	0.9997	0.9997	0.9996	0.9994	0.9993
3	0.60718E-02	1.0000	1.0000	1.0002	1.0014	1.0028	1.0032
4	0.16123E-01	1.0012	1.0012	1.0010	0.9999	0.9983	0.9977
5	0.36967E-01	1.0000	0.9999	0.9990	0.9944	0.9892	0.9878
6	0.76747E-01	1.0000	0.9998	0.9983	0.9901	0.9825	0.9807
7	0.15902E+00	1.0001	1.0000	0.9995	0.9970	0.9949	0.9945
8	0.20663E+00	1.0000	1.0000	0.9999	0.9998	0.9997	0.9996
9	0.28519E+00	1.0002	1.0002	1.0003	1.0001	1.0000	1.0000
10	0.45131E+00	0.9997	0.9996	0.9991	0.9975	0.9963	0.9960
11	0.80085E+00	1.0000	1.0000	0.9995	0.9975	0.9962	0.9960
12	0.15855E+01	1.0000	0.9999	0.9991	0.9963	0.9946	0.9943
13	0.23134E+01	1.0000	1.0000	0.9998	0.9988	0.9983	0.9982
14	0.26511E+01	0.9998	0.9997	0.9996	0.9992	0.9988	0.9988
15	0.29509E+01	0.9998	0.9997	0.9994	0.9982	0.9976	0.9975
16	0.32012E+01	1.0000	0.9999	0.9996	0.9989	0.9986	0.9986
17	0.34900E+01	0.9998	0.9995	0.9980	0.9948	0.9938	0.9937
18	0.49282E+01	0.9986	0.9980	0.9906	0.9814	0.9787	0.9784
19	0.72319E+01	0.9991	0.9998	0.9987	0.9989	0.9994	0.9995
20	0.10079E+02	0.9998	1.0004	0.9989	0.9953	0.9943	0.9942
21	0.26647E+02	0.9600	0.7844	0.5668	0.5007	0.4921	0.4911
22	0.26259E+02	0.9802	0.8898	0.7779	0.7461	0.7420	0.7416
23	0.35400E+02	0.9920	0.9436	0.8496	0.8172	0.8151	0.8126
24	0.33998E+02	0.9995	0.9957	0.9829	0.9750	0.9740	0.9738
25	0.67474E+02	0.9994	0.9954	0.9839	0.9792	0.9785	0.9786

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM243 MATNO = 7186
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.20798E+01	0.9999	0.9999	0.9999	0.9998	0.9996	0.9996
2	0.18640E+01	0.9998	0.9998	0.9998	1.0000	1.0002	1.0003
3	0.19995E+01	1.0000	1.0000	1.0000	1.0001	1.0001	1.0002
4	0.21334E+01	0.9999	0.9999	1.0000	1.0002	1.0003	1.0004
5	0.19689E+01	1.0000	1.0000	1.0001	1.0007	1.0013	1.0013
6	0.18743E+01	1.0000	1.0000	1.0001	1.0006	1.0011	1.0013
7	0.18550E+01	1.0000	1.0000	1.0000	0.9998	0.9995	0.9995
8	0.19553E+01	0.9998	0.9998	0.9998	0.9997	0.9996	0.9996
9	0.22537E+01	1.0001	1.0001	1.0000	1.0000	0.9999	0.9999
10	0.28374E+01	1.0000	1.0000	0.9998	0.9989	0.9983	0.9982
11	0.35745E+01	1.0000	1.0000	0.9998	0.9991	0.9985	0.9984
12	0.43010E+01	1.0000	1.0000	0.9998	0.9992	0.9987	0.9987
13	0.51449E+01	1.0000	0.9999	0.9995	0.9981	0.9973	0.9972
14	0.79477E+01	1.0000	0.9998	0.9986	0.9949	0.9929	0.9925
15	0.12755E+02	1.0000	0.9998	0.9981	0.9934	0.9913	0.9909
16	0.20335E+02	1.0000	0.9996	0.9974	0.9917	0.9896	0.9893
17	0.32846E+02	0.9998	0.9987	0.9919	0.9823	0.9797	0.9794
18	0.70562E+02	0.9930	0.9419	0.7557	0.5874	0.5469	0.5416
19	0.63916E+02	0.9937	0.9473	0.7836	0.6451	0.6126	0.6083
20	0.39403E+02	0.9977	0.9818	0.9226	0.8714	0.8603	0.8589
21	0.19235E+03	0.9537	0.7574	0.5360	0.4734	0.4654	0.4644
22	0.20737E+03	0.9778	0.8774	0.7554	0.7217	0.7176	0.7171
23	0.21468E+03	0.9916	0.9398	0.8349	0.7964	0.7914	0.7908
24	0.13395E+03	0.9998	0.9979	0.9917	0.9879	0.9874	0.9873
25	0.19688E+03	0.9997	0.9974	0.9905	0.9876	0.9872	0.9871

NUCLID = CM243 MAT NUMBER = 7186

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.37054E+00	2.13722E-02		
2	3.98002E+00	2.20751E-02		
3	3.67760E+00	2.23978E-02		
4	3.40627E+00	1.80848E-02		
5	4.22729E+00	3.94634E-02		
6	6.22353E+00	6.37240E-02		
7	8.43921E+00	9.04528E-02		
8	9.68741E+00	1.10261E-01		
9	1.03525E+01	1.11734E-01		
10	1.06835E+01	1.15694E-01		
11	1.08357E+01	1.18939E-01		
12	1.10273E+01	1.21788E-01		
13	1.12157E+01	1.22245E-01		
14	1.13017E+01	1.23821E-01		
15	1.13420E+01	1.24072E-01		
16	1.13616E+01	1.23294E-01		
17	1.13694E+01	1.24312E-01		
18	1.13734E+01	1.24300E-01		
19	1.24168E+01	2.41871E-01		
20	2.51170E+01	2.42694E-01		
21	2.29251E+01	2.47768E-01		
22	2.21991E+01	2.41360E-01		
23	2.35831E+01	2.02746E-01		
24	1.86296E+01	1.84815E-01		
25	1.48474E+01	0.0		

NUCLID = CM243 MAT NUMBER = 7166

TABLE OF INEL+(N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	J=	1	2	3	4						
1	11	6.78716E-04	4.08816E-03	5.59926E-02	2.35203E-01	4.52193E-01	5.61729E-01	3.69608E-01	1.59389E-01	6.31791E-02	1.86306E-02
		3.14652E-03									
2		9.64551E-03	1.00326E-01	3.44777E-01	4.11761E-01	3.10118E-01	1.31370E-01	4.55478E-02	1.36067E-02	4.67089E-02	7.74827E-02
		0.0									
3		3.32749E-02	2.33943E-01	3.96761E-01	4.11650E-01	2.01280E-01	6.95336E-02	2.15462E-02	5.39678E-03	8.79199E-04	0.0
		0.0									
4		1.37087E-01	3.68567E-01	5.01241E-01	2.90710E-01	1.10163E-01	3.77335E-02	9.82218E-03	1.59403E-03	0.0	0.0
		0.0									
5		2.60493E-01	7.57307E-01	5.44677E-01	2.67306E-01	1.06451E-01	2.94177E-02	4.96660E-03	0.0	0.0	0.0
		0.0									
6		3.59105E-01	5.70989E-01	5.96695E-01	3.30980E-01	1.67607E-01	4.45973E-02	0.0	0.0	0.0	0.0
		0.0									
7		2.63282E-01	3.52233E-01	1.97121E-01	8.53851E-01	3.38752E-01	0.0	0.0	0.0	0.0	0.0
		0.0									
8		5.78395E-02	3.74581E-02	1.00144E+00	4.11948E-01	0.0	0.0	0.0	0.0	0.0	0.0
		0.0									
9		0.0	9.71460E-02	1.35050E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0									

NUCLID = CM244 MAT NO = 7187
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.71043E+00	1.89279E+00	4.59573E+00	3.01992E-03	3.44992E+00	8.24101E-01	5.40593E-01	8.69087E-01	2.12168E-02
2	7.29671E+00	1.56925E+00	4.04794E+00	4.18108E-03	3.98224E+00	1.74104E+00	0.0	8.25069E-01	2.18918E-02
3	7.00688E+00	1.67409E+00	3.71834E+00	6.03028E-03	3.63995E+00	1.68681E+00	0.0	7.34459E-01	2.20588E-02
4	6.99583E+00	1.69797E+00	3.49363E+00	1.61226E-02	3.45855E+00	1.82319E+00	0.0	6.50687E-01	1.83451E-02
5	8.01433E+00	1.58556E+00	3.34597E+00	3.88177E-02	4.41577E+00	1.97419E+00	0.0	5.78503E-01	4.07356E-02
6	8.55948E+00	7.65498E-01	3.26092E+00	8.06251E-02	6.01468E+00	1.69868E+00	0.0	3.48428E-01	5.62410E-02
7	8.21918E+00	1.28003E-01	3.20075E+00	1.59023E-01	7.19864E+00	7.33522E-01	0.0	2.34912E-01	7.36135E-02
8	1.05994E+01	8.11013E-02	3.17209E+00	2.06628E-01	1.01011E+01	2.10585E-01	0.0	1.38971E-01	1.29897E-01
9	1.34535E+01	8.00121E-02	3.15567E+00	2.55912E-01	1.30723E+01	4.52000E-02	0.0	5.93994E-02	1.46453E-01
10	1.56995E+01	9.25016E-02	3.14916E+00	6.00415E-01	1.50065E+01	5.76237E-05	0.0	2.18202E-02	1.68650E-01
11	1.69653E+01	9.82968E-02	3.14670E+00	8.96816E-01	1.59701E+01	0.0	0.0	6.45503E-03	1.49208E-01
12	1.39088E+01	1.00000E-01	3.14549E+00	1.17039E+00	1.26385E+01	0.0	0.0	2.75505E-03	1.66426E-01
13	2.03648E+01	1.00000E-01	3.14480E+00	1.99665E+00	1.82682E+01	0.0	0.0	2.75505E-03	2.17732E-01
14	2.54584E+01	1.25243E-01	3.14446E+00	3.66866E+00	2.16645E+01	0.0	0.0	2.75505E-03	2.43775E-01
15	4.04805E+01	3.32035E-01	3.14431E+00	9.71436E+00	3.04341E+01	0.0	0.0	2.75505E-03	3.43547E-01
16	5.22131E+01	5.83790E-01	3.14426E+00	1.46050E+01	3.70243E+01	0.0	0.0	2.75505E-03	2.22789E-01
17	3.90622E+01	7.21479E-01	3.14423E+00	1.16178E+01	2.67229E+01	0.0	0.0	2.75505E-03	2.48426E-01
18	4.85569E+01	4.38282E-01	3.14421E+00	1.74423E+01	3.06762E+01	0.0	0.0	2.75505E-03	2.33106E-01
19	5.40528E+01	4.87983E-01	3.14421E+00	2.78081E+01	2.57567E+01	0.0	0.0	2.75505E-03	2.32167E-01
20	6.22032E+01	3.39090E-01	3.14420E+00	3.56518E+01	2.62123E+01	0.0	0.0	2.75505E-03	3.23143E-01
21	9.06035E+02	3.32623E+01	3.14420E+00	6.61849E+02	2.10923E+02	0.0	0.0	2.75505E-03	1.77681E-01
22	1.83085E+01	1.18614E-01	3.14419E+00	3.15317E+00	1.50367E+01	0.0	0.0	2.75505E-03	1.37353E-01
23	1.70496E+01	1.45785E-01	3.14420E+00	3.36525E+00	1.35386E+01	0.0	0.0	2.75505E-03	1.51401E-01
24	1.79205E+01	2.13585E-01	3.14420E+00	3.41379E+00	1.42931E+01	0.0	0.0	2.75505E-03	1.46802E-01
25	1.61417E+01	3.13539E-01	3.14486E+00	3.08607E+00	1.27421E+01	0.0	0.0	6.11061E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM244 MATNO = 7187
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9988	0.9968	0.9963
2	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
3	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
4	0.9999	0.9999	0.9998	0.9994	0.9989	0.9988
5	1.0000	1.0000	0.9997	0.9984	0.9966	0.9961
6	0.9998	0.9998	0.9998	0.9996	0.9995	0.9994
7	0.9999	0.9998	0.9998	0.9998	0.9998	0.9998
8	1.0000	0.9997	0.9977	0.9874	0.9776	0.9755
9	1.0000	1.0000	0.9996	0.9981	0.9969	0.9967
10	1.0000	1.0000	0.9996	0.9981	0.9971	0.9969
11	0.9999	0.9998	0.9995	0.9981	0.9971	0.9969
12	0.9999	0.9996	0.9978	0.9899	0.9841	0.9830
13	1.0000	0.9997	0.9977	0.9907	0.9867	0.9860
14	1.0000	0.9999	0.9991	0.9969	0.9958	0.9956
15	0.9990	0.9401	0.8064	0.7647	0.7584	0.7576
16	0.9617	0.7365	0.5111	0.4459	0.4338	0.4321
17	0.9671	0.7795	0.6138	0.5682	0.5604	0.5594
18	0.8888	0.6448	0.5154	0.4745	0.4671	0.4662
19	0.9705	0.7010	0.5010	0.4638	0.4591	0.4586
20	0.8662	0.5668	0.4530	0.4303	0.4259	0.4253
21	0.2539	0.0922	0.0454	0.0329	0.0308	0.0306
22	0.9999	0.9995	0.9969	0.9872	0.9814	0.9804
23	0.9999	0.9998	0.9997	0.9992	0.9989	0.9988
24	0.9999	0.9998	0.9992	0.9971	0.9958	0.9955
25	0.9996	0.9996	0.9996	0.9995	0.9995	0.9995

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM244 MATNO = 7187

REACTION = ELASTIC

TEMPERATURE = 300. K

GROUP	INFINITE DILU				SIGMA 0 =			
	X-SECTION	10000.	1000.	100.	10.	1.	0.	
1	0.34499E+01	0.9999	0.9999	0.9997	0.9985	0.9967	0.9962	
2	0.39822E+01	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999	
3	0.36400E+01	0.9999	0.9999	0.9998	0.9995	0.9992	0.9991	
4	0.34586E+01	1.0000	1.0000	1.0000	0.9997	0.9993	0.9993	
5	0.44158E+01	1.0000	1.0000	0.9997	0.9980	0.9964	0.9957	
6	0.60147E+01	1.0000	1.0000	1.0000	1.0003	1.0007	1.0008	
7	0.71986E+01	0.9998	0.9998	0.9998	1.0000	1.0000	1.0000	
8	0.10101E+02	1.0000	0.9998	0.9986	0.9924	0.9864	0.9847	
9	0.13072E+02	1.0000	1.0000	0.9998	0.9990	0.9983	0.9982	
10	0.15006E+02	1.0000	1.0000	0.9998	0.9991	0.9986	0.9985	
11	0.15970E+02	1.0000	1.0000	0.9997	0.9990	0.9985	0.9984	
12	0.12638E+02	1.0000	0.9998	0.9983	0.9928	0.9888	0.9882	
13	0.18268E+02	1.0000	0.9998	0.9989	0.9959	0.9938	0.9939	
14	0.21664E+02	0.9999	0.9999	0.9996	0.9989	0.9986	0.9986	
15	0.30434E+02	0.9928	0.9512	0.8604	0.8136	0.8052	0.8041	
16	0.37024E+02	0.9746	0.8558	0.6864	0.6166	0.6029	0.6010	
17	0.26723E+02	0.9838	0.9110	0.8200	0.7872	0.7806	0.7798	
18	0.30676E+02	0.9531	0.8223	0.7295	0.7011	0.6955	0.6947	
19	0.25757E+02	0.9891	0.9455	0.8959	0.8785	0.8753	0.8750	
20	0.26212E+02	0.9916	0.9644	0.9423	0.9338	0.9314	0.9311	
21	0.21092E+03	0.4713	0.2159	0.1316	0.1055	0.1006	0.1000	
22	0.15037E+02	1.0000	0.9998	0.9979	0.9911	0.9870	0.9864	
23	0.13539E+02	1.0000	1.0000	0.9999	0.9998	0.9996	0.9996	
24	0.14293E+02	1.0002	1.0001	0.9999	0.9994	0.9993	0.9992	
25	0.12742E+02	1.0004	1.0004	1.0002	0.9997	0.9993	0.9992	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM244 MATNO = 7187

REACTION = CAPTURE

TEMPERATURE = 300. K

GROUP	INFINITE DILU				SIGMA 0 =			
	X-SECTION	10000.	1000.	100.	10.	1.	0.	
1	0.30199E-02	0.9998	0.9998	0.9994	0.9975	0.9946	0.9937	
2	0.41811E-02	1.0003	1.0003	1.0003	1.0001	1.0000	0.9999	
3	0.60303E-02	1.0000	1.0000	1.0002	1.0015	1.0032	1.0037	
4	0.16123E-01	1.0012	1.0012	1.0009	0.9993	0.9970	0.9961	
5	0.38816E-01	1.0001	1.0000	0.9992	0.9953	0.9898	0.9884	
6	0.80625E-01	1.0000	1.0000	1.0003	1.0018	1.0036	1.0040	
7	0.15902E+00	1.0001	1.0001	1.0001	1.0002	1.0003	1.0004	
8	0.20663E+00	1.0000	0.9999	0.9995	0.9975	0.9960	0.9958	
9	0.25591E+00	1.0000	0.9999	0.9994	0.9973	0.9955	0.9952	
10	0.60042E+00	0.9999	0.9998	0.9988	0.9948	0.9919	0.9913	
11	0.89682E+00	1.0000	1.0001	1.0002	1.0007	1.0011	1.0011	
12	0.11704E+01	1.0000	0.9998	0.9988	0.9940	0.9907	0.9903	
13	0.19967E+01	1.0000	0.9997	0.9974	0.9898	0.9855	0.9848	
14	0.36687E+01	1.0000	0.9998	0.9981	0.9936	0.9914	0.9912	
15	0.97144E+01	0.9895	0.9259	0.7761	0.6982	0.6848	0.6832	
16	0.14605E+02	0.9606	0.7553	0.3866	0.2151	0.1856	0.1819	
17	0.11618E+02	0.9521	0.7142	0.3408	0.1797	0.1526	0.1493	
18	0.17442E+02	0.8956	0.5782	0.2788	0.1624	0.1420	0.1395	
19	0.27808E+02	0.9288	0.6256	0.2503	0.1261	0.1072	0.1049	
20	0.35652E+02	0.8760	0.4793	0.1802	0.1058	0.0948	0.0935	
21	0.66185E+03	0.4233	0.1454	0.0562	0.0325	0.0286	0.0282	
22	0.31532E+01	1.0000	1.0002	1.0014	1.0060	1.0088	1.0093	
23	0.33653E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998	
24	0.34138E+01	1.0001	1.0000	0.9989	0.9948	0.9923	0.9918	
25	0.30861E+01	1.0005	1.0005	1.0006	1.0008	1.0010	1.0010	

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM244 MATNO = 7187

REACTION = FISSION

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.18928E+01	0.9998	0.9998	0.9998	0.9998	0.9998	0.9996
2	0.15692E+01	1.0000	1.0000	1.0000	1.0001	1.0003	1.0003
3	0.16741E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0003
4	0.16980E+01	1.0001	1.0001	1.0000	0.9998	1.0001	1.0002
5	0.15856E+01	1.0000	1.0000	1.0002	1.0010	1.0022	1.0025
6	0.76550E+00	1.0000	0.9999	0.9995	0.9972	0.9945	0.9939
7	0.12800E+00	1.0000	1.0000	1.0000	0.9997	0.9993	0.9992
8	0.81101E-01	1.0000	1.0001	1.0010	1.0054	1.0096	1.0105
9	0.80012E-01	1.0000	0.9999	0.9996	0.9985	0.9975	0.9974
10	0.92502E-01	0.9998	0.9998	0.9998	0.9994	0.9991	0.9988
11	0.98297E-01	1.0000	1.0001	1.0002	1.0002	1.0003	1.0003
12	0.10000E+00	1.0000	0.9998	0.9998	1.0000	1.0000	1.0000
13	0.10000E+00	1.0000	1.0000	1.0001	1.0000	1.0000	1.0000
14	0.12524E+00	0.9997	0.9998	0.9987	0.9955	0.9939	0.9938
15	0.33204E+00	0.9868	0.9080	0.7365	0.6557	0.6426	0.6411
16	0.58379E+00	0.9719	0.8214	0.5385	0.4093	0.3882	0.3857
17	0.72148E+00	0.9801	0.8848	0.7413	0.6825	0.6721	0.6708
18	0.43828E+00	0.9701	0.8578	0.6600	0.5251	0.4966	0.4929
19	0.48798E+00	0.9528	0.7524	0.5048	0.4218	0.4086	0.4070
20	0.33909E+00	0.9237	0.6803	0.5000	0.4583	0.4524	0.4517
21	0.33262E+02	0.4230	0.1452	0.0562	0.0325	0.0286	0.0281
22	0.11861E+00	1.0000	0.9998	0.9985	0.9937	0.9909	0.9904
23	0.14578E+00	1.0000	1.0000	0.9996	0.9986	0.9978	0.9976
24	0.21359E+00	1.0004	1.0002	1.0005	1.0023	1.0033	1.0036
25	0.31354E+00	0.9998	0.9998	1.0001	1.0001	1.0003	1.0006

NUCLID = CM244 MAT NUMBER = 7187

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.42871E+00	2.12168E-02		
2	3.96034E+00	2.18919E-02		
3	3.61789E+00	2.20588E-02		
4	3.44021E+00	1.83450E-02		
5	4.37504E+00	4.07356E-02		
6	5.95844E+00	5.62409E-02		
7	7.12502E+00	7.36135E-02		
8	9.97117E+00	1.29898E-01		
9	1.29259E+01	1.46453E-01		
10	1.48378E+01	1.68651E-01		
11	1.58209E+01	1.49209E-01		
12	1.24720E+01	1.66426E-01		
13	1.80504E+01	2.17732E-01		
14	2.14207E+01	2.43775E-01		
15	3.00906E+01	3.43548E-01		
16	3.68015E+01	2.22789E-01		
17	2.64745E+01	2.48425E-01		
18	3.04431E+01	2.33107E-01		
19	2.55245E+01	2.32167E-01		
20	2.58891E+01	3.23143E-01		
21	2.10745E+02	1.77687E-01		
22	1.48994E+01	1.37353E-01		
23	1.33872E+01	1.51401E-01		
24	1.41463E+01	1.46802E-01		
25	1.27421E+01	0.0		

NUCLID = CM244 MAT NUMBER = 7187
 TABLE OF INELA+(N,ZN) MATRICES

GROUP	EXIT	GROUP	**	KK	**	KK	=	1	+	J	=	1	2	3	4	5	6	7	8	9	10
1	J=	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1,19992E-02	1,32821E-02	6,15629E-02	2,45362E-01	3,50633E-01	3,85559E-01	2,88655E-01	3,01613E-01	1,81352E-01	1,81352E-01	6,40885E-02	1,19992E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2	0,0	5,93068E-02	3,38258E-01	5,02487E-01	5,04143E-01	2,35522E-01	7,44289E-02	2,27332E-02	5,31910E-03	8,46514E-04	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
3	5,01010E-02	3,42818E-01	4,72387E-01	4,85762E-01	2,28473E-01	7,60719E-02	2,37577E-02	6,37069E-03	1,06795E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
4	2,36342E-01	4,61512E-01	5,88810E-01	3,46596E-01	1,32035E-01	4,48357E-02	1,12009E-02	1,85646E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5	2,44637E-01	7,80908E-01	5,67432E-01	2,59678E-01	9,32153E-02	2,43203E-02	3,99841E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
6	3,73023E-01	6,92158E-01	3,94619E-01	1,79231E-01	5,09306E-02	8,72090E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
7	1,17207E-01	2,75835E-01	2,45096E-01	8,07241E-02	1,46611E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
8	1,81018E-02	2,06106E-02	6,60691E-02	1,05804E-01	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
9	4,89372E-04	1,62568E-02	2,84538E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
10	0,0	0,0	0,0	2,08166E-05	3,68072E-05	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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NUCLID = CM245 MAT NO = 7188
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.69270E+00	2.07984E+00	5.00037E+00	3.77593E-03	3.45489E+00	3.84538E-01	7.69650E-01	8.64882E-01	2.26694E-02
2	7.28519E+00	1.86395E+00	4.54319E+00	4.49407E-03	3.97917E+00	1.37040E+00	6.71810E-02	8.21398E-01	2.37165E-02
3	7.01816E+00	1.99953E+00	4.20091E+00	6.07184E-03	3.63829E+00	1.37426E+00	0.0	7.24009E-01	2.23461E-02
4	7.19965E+00	2.12986E+00	3.97049E+00	1.61226E-02	3.59962E+00	1.45405E+00	0.0	6.49315E-01	1.99211E-02
5	8.22108E+00	1.81757E+00	3.81497E+00	3.69671E-02	4.55813E+00	1.80841E+00	0.0	5.82439E-01	4.02004E-02
6	1.00997E+01	1.82556E+00	3.71603E+00	7.67474E-02	6.38746E+00	1.80989E+00	0.0	2.37974E-01	7.59597E-02
7	1.20549E+01	2.06619E+00	3.66006E+00	1.59023E-01	8.12157E+00	1.70813E+00	0.0	9.18408E-02	9.69076E-02
8	1.32001E+01	2.25492E+00	3.63369E+00	2.06628E-01	9.42060E+00	1.31799E+00	0.0	4.01141E-02	1.15710E-01
9	1.28966E+01	2.39950E+00	3.61936E+00	2.85188E-01	1.00000E+01	2.11923E-01	0.0	1.31621E-02	1.07211E-01
10	1.30884E+01	2.63711E+00	3.61230E+00	4.51306E-01	1.00000E+01	0.0	0.0	2.74450E-03	1.06442E-01
11	1.43021E+01	3.50126E+00	3.60893E+00	8.00845E-01	1.00000E+01	0.0	0.0	2.74450E-03	1.07267E-01
12	1.65404E+01	4.95491E+00	3.60751E+00	1.58548E+00	1.00000E+01	0.0	0.0	2.74450E-03	1.07232E-01
13	1.86761E+01	6.36266E+00	3.60679E+00	2.31342E+00	1.00000E+01	0.0	0.0	2.74450E-03	1.06442E-01
14	2.27056E+01	1.00545E+01	3.60648E+00	2.65114E+00	1.00000E+01	0.0	0.0	2.74450E-03	1.07267E-01
15	2.68660E+01	1.39095E+01	3.60633E+00	2.95094E+00	1.00056E+01	0.0	0.0	2.74450E-03	1.07586E-01
16	3.32727E+01	2.00001E+01	3.60626E+00	3.20116E+00	1.00715E+01	0.0	0.0	2.74450E-03	1.07522E-01
17	5.08291E+01	3.71692E+01	3.60623E+00	3.49000E+00	1.01699E+01	0.0	0.0	2.74450E-03	1.10092E-01
18	8.58599E+01	7.05619E+01	3.60621E+00	4.92817E+00	1.03699E+01	0.0	0.0	2.74450E-03	1.11521E-01
19	8.16160E+01	6.39161E+01	3.60621E+00	7.23187E+00	1.04680E+01	0.0	0.0	2.74450E-03	1.12632E-01
20	6.18466E+01	3.94030E+01	3.60620E+00	1.00790E+01	1.23646E+01	0.0	0.0	2.74450E-03	2.41226E-01
21	2.43310E+02	1.92350E+02	3.60620E+00	2.66474E+01	2.43127E+01	0.0	0.0	2.74450E-03	3.00597E-01
22	2.52722E+02	2.07370E+02	3.60620E+00	2.62590E+01	1.90927E+01	0.0	0.0	2.74450E-03	2.29074E-01
23	2.88318E+02	2.34096E+02	3.60620E+00	3.54001E+01	1.88223E+01	0.0	0.0	2.74450E-03	2.07343E-01
24	2.90531E+02	2.36790E+02	3.60620E+00	3.39980E+01	1.97430E+01	0.0	0.0	2.74450E-03	2.13117E-01
25	4.96195E+02	4.08795E+02	3.60620E+00	6.74741E+01	1.99260E+01	0.0	0.0	6.28005E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM245 MATNO = 7188
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9998	0.9989	0.9973	0.9967	
2	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	
3	0.9997	0.9997	0.9996	0.9995	0.9993	0.9992	
4	1.0000	1.0000	0.9999	0.9991	0.9982	0.9980	
5	1.0000	1.0000	0.9998	0.9990	0.9980	0.9977	
6	1.0000	0.9999	0.9993	0.9961	0.9929	0.9922	
7	1.0000	1.0000	0.9998	0.9988	0.9979	0.9978	
8	1.0000	1.0000	0.9999	0.9997	0.9995	0.9995	
9	0.9999	0.9999	0.9999	0.9997	0.9995	0.9995	
10	1.0000	1.0000	0.9999	0.9997	0.9996	0.9995	
11	1.0000	1.0000	0.9998	0.9990	0.9984	0.9983	
12	1.0000	0.9999	0.9991	0.9954	0.9930	0.9926	
13	1.0000	1.0000	0.9987	0.9939	0.9911	0.9907	
14	1.0000	0.9997	0.9941	0.9760	0.9672	0.9658	
15	1.0000	0.9979	0.9743	0.9198	0.8977	0.8944	
16	1.0000	0.9953	0.9584	0.8912	0.8679	0.8645	
17	0.9989	0.9821	0.9003	0.7976	0.7682	0.7642	
18	0.9903	0.9111	0.6687	0.4853	0.4445	0.4392	
19	0.9910	0.9232	0.7259	0.5781	0.5423	0.5375	
20	0.9996	0.9821	0.9025	0.8082	0.7810	0.7773	
21	0.9214	0.6573	0.4694	0.4310	0.4264	0.4258	
22	0.9616	0.8183	0.6980	0.6710	0.6677	0.6674	
23	0.9887	0.9234	0.8269	0.8026	0.7998	0.7995	
24	0.9988	0.9907	0.9686	0.9580	0.9565	0.9564	
25	0.9978	0.9848	0.9609	0.9535	0.9526	0.9525	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM245 MATNO = 7188

REACTION = ELASTIC

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,34549E+01	0,9999	0,9999	0,9997	0,9985	0,9968	0,9963
2	0,39792E+01	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000
3	0,36383E+01	1,0000	1,0000	0,9999	0,9997	0,9994	0,9993
4	0,35996E+01	1,0000	1,0000	0,9999	0,9990	0,9984	0,9982
5	0,45581E+01	1,0000	1,0000	0,9997	0,9988	0,9973	0,9970
6	0,63875E+01	1,0000	0,9999	0,9994	0,9968	0,9940	0,9935
7	0,81216E+01	1,0000	1,0000	0,9997	0,9991	0,9985	0,9984
8	0,94206E+01	0,9998	0,9998	0,9997	0,9997	0,9993	0,9993
9	0,10000E+02	1,0000	1,0000	0,9998	0,9999	1,0000	1,0000
10	0,10000E+02	1,0000	1,0000	0,9999	1,0000	1,0000	1,0000
11	0,10000E+02	1,0000	1,0000	0,9999	1,0000	1,0000	1,0000
12	0,10000E+02	1,0000	0,9999	1,0000	1,0000	1,0000	1,0000
13	0,10000E+02	1,0010	0,9998	1,0000	1,0000	1,0000	1,0001
14	0,10000E+02	1,0002	1,0000	1,0000	1,0000	1,0000	1,0000
15	0,10006E+02	1,0004	1,0000	1,0000	1,0000	1,0000	1,0000
16	0,10072E+02	0,9992	1,0000	1,0000	0,9999	0,9999	0,9999
17	0,10170E+02	0,9997	1,0000	0,9999	0,9997	0,9996	0,9996
18	0,10370E+02	0,9991	1,0000	0,9999	0,9998	0,9997	0,9997
19	0,10468E+02	0,9968	0,9999	1,0000	1,0000	1,0000	1,0000
20	0,12365E+02	0,9993	0,9976	0,9820	0,9587	0,9523	0,9515
21	0,24313E+02	0,9971	0,9828	0,9616	0,9534	0,9522	0,9521
22	0,19093E+02	0,9990	0,9980	0,9966	0,9963	0,9962	0,9962
23	0,18822E+02	0,9993	0,9976	0,9942	0,9931	0,9930	0,9930
24	0,19743E+02	0,9999	0,9998	0,9993	0,9991	0,9991	0,9991
25	0,19926E+02	0,9999	1,0000	0,9998	0,9998	0,9998	0,9998

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM245 MATNO = 7188

REACTION = CAPTURE

TEMPERATURE= 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,37759E+02	0,9999	0,9998	0,9997	0,9986	0,9972	0,9968
2	0,44941E+02	1,0003	1,0003	1,0002	1,0002	1,0001	1,0001
3	0,60718E+02	1,0000	1,0000	1,0002	1,0011	1,0024	1,0027
4	0,16123E+01	1,0000	1,0000	0,9995	0,9967	0,9943	0,9934
5	0,36967E+01	1,0000	0,9999	0,9993	0,9961	0,9930	0,9919
6	0,76747E+01	1,0000	0,9998	0,9983	0,9908	0,9830	0,9813
7	0,15902E+00	1,0001	1,0001	0,9995	0,9975	0,9955	0,9951
8	0,20663E+00	0,9998	0,9998	0,9997	0,9997	0,9993	0,9992
9	0,28519E+00	1,0002	1,0002	1,0005	1,0010	1,0015	1,0016
10	0,45131E+00	1,0000	0,9999	0,9996	0,9984	0,9972	0,9970
11	0,80085E+00	1,0000	0,9999	0,9994	0,9971	0,9955	0,9952
12	0,15855E+01	0,9993	1,0004	0,9991	0,9950	0,9924	0,9919
13	0,23134E+01	1,0000	1,0003	1,0000	0,9991	0,9985	0,9984
14	0,26511E+01	1,0002	1,0004	1,0001	0,9991	0,9986	0,9986
15	0,29509E+01	1,0008	1,0001	1,0002	0,9983	0,9977	0,9976
16	0,32012E+01	0,9996	1,0003	1,0007	0,9998	0,9997	0,9996
17	0,34900E+01	0,9997	0,9996	0,9973	0,9941	0,9932	0,9930
18	0,49282E+01	0,9987	0,9980	0,9905	0,9810	0,9782	0,9779
19	0,72319E+01	0,9992	0,9999	0,9996	1,0007	1,0013	1,0014
20	0,10079E+02	0,9999	1,0006	0,9986	0,9917	0,9892	0,9889
21	0,26647E+02	0,9600	0,7844	0,5668	0,5003	0,4915	0,4905
22	0,26259E+02	0,9802	0,8902	0,7787	0,7469	0,7428	0,7423
23	0,35400E+02	0,9928	0,9493	0,8685	0,8424	0,8392	0,8388
24	0,33998E+02	0,9990	0,9924	0,9752	0,9674	0,9663	0,9663
25	0,67474E+02	0,9986	0,9904	0,9757	0,9710	0,9707	0,9706

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM245 MATNO = 7188
 REACTION = FISSION
 TEMPERATURE = 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0.20798E+01	0.9999	0.9999	0.9998	0.9997	0.9996	0.9995
2	0.18640E+01	1.0003	1.0003	1.0003	1.0004	1.0006	1.0007
3	0.19995E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0002
4	0.21299E+01	1.0000	1.0000	1.0001	1.0004	1.0006	1.0009
5	0.18176E+01	1.0000	1.0000	1.0001	1.0006	1.0009	1.0010
6	0.18256E+01	1.0000	1.0000	0.9999	0.9996	0.9989	0.9988
7	0.20662E+01	0.9998	0.9998	0.9997	0.9993	0.9987	0.9986
8	0.22549E+01	1.0000	1.0000	1.0000	0.9998	0.9998	0.9998
9	0.23995E+01	1.0000	1.0000	1.0001	1.0002	1.0004	1.0004
10	0.26371E+01	1.0000	1.0000	0.9999	0.9995	0.9992	0.9991
11	0.35013E+01	1.0000	1.0000	0.9996	0.9983	0.9973	0.9971
12	0.49549E+01	1.0000	0.9998	0.9984	0.9933	0.9901	0.9895
13	0.63627E+01	1.0000	0.9997	0.9975	0.9905	0.9864	0.9858
14	0.10054E+02	0.9999	0.9989	0.9916	0.9703	0.9597	0.9580
15	0.13909E+02	0.9996	0.9965	0.9733	0.9163	0.8920	0.8884
16	0.20000E+02	0.9994	0.9945	0.9623	0.8988	0.8758	0.8725
17	0.37169E+02	0.9986	0.9868	0.9243	0.8390	0.8145	0.8112
18	0.70562E+02	0.9930	0.9418	0.7545	0.5829	0.5408	0.5352
19	0.63916E+02	0.9937	0.9474	0.7835	0.6434	0.6100	0.6056
20	0.39403E+02	0.9978	0.9801	0.9083	0.8269	0.8045	0.8015
21	0.19235E+03	0.9535	0.7563	0.5345	0.4718	0.4637	0.4628
22	0.20737E+03	0.9779	0.8780	0.7565	0.7228	0.7187	0.7182
23	0.23410E+03	0.9938	0.9267	0.8879	0.8657	0.8630	0.8627
24	0.23679E+03	0.9994	0.9948	0.9822	0.9763	0.9755	0.9754
25	0.40879E+03	0.9987	0.9912	0.9775	0.9733	0.9728	0.9728

NUCLID = CM245 MAT NUMBER = 7188

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **		KK = I + J - 1
			1	2	
1	J=	1			
1	3.43222E+00	2.26694E-02			
2	3.95545E+00	2.37165E-02			
3	3.61595E+00	2.23462E-02			
4	3.57970E+00	1.99211E-02			
5	4.51793E+00	4.02004E-02			
6	6.31150E+00	7.59597E-02			
7	8.02467E+00	9.69079E-02			
8	9.30489E+00	1.15710E-01			
9	9.89279E+00	1.07211E-01			
10	9.89356E+00	1.06442E-01			
11	9.89273E+00	1.07267E-01			
12	9.89277E+00	1.07232E-01			
13	9.89356E+00	1.06442E-01			
14	9.89273E+00	1.07267E-01			
15	9.89799E+00	1.07587E-01			
16	9.96398E+00	1.07522E-01			
17	1.00598E+01	1.10092E-01			
18	1.02583E+01	1.11521E-01			
19	1.03554E+01	1.12632E-01			
20	1.21234E+01	2.41226E-01			
21	2.40121E+01	3.00597E-01			
22	1.88637E+01	2.29074E-01			
23	1.86150E+01	2.07342E-01			
24	1.95299E+01	2.13118E-01			
25	1.99260E+01	0.0			

NUCLID = CM245 MAT NUMBER = 7188

TABLE OF INELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	J=	1	2	3	4					
1	6,78716E-04	4,08816E-03	5,59928E-02	2,65960E-01	4,80172E-01	5,62654E-01	3,41883E-01	1,41208E-01	5,33870E-02	1,52575E-02
	2,55601E-03									
2	9,64551E-03	1,00326E-01	3,44777E-01	4,11761E-01	3,10906E-01	1,34766E-01	4,78122E-02	1,45971E-02	4,90295E-02	8,11377E-02
	0,0									
3	3,32749E-02	2,33943E-01	3,96761E-01	4,11650E-01	2,01280E-01	6,95336E-02	2,15462E-02	5,39678E-03	8,79199E-04	0,0
	0,0									
4	1,36983E-01	3,67890E-01	5,00161E-01	2,90071E-01	1,09913E-01	3,76458E-02	9,79944E-03	1,59033E-03	0,0	0,0
	0,0									
5	2,41947E-01	6,95683E-01	4,98458E-01	2,43941E-01	9,70474E-02	2,68112E-02	4,52510E-03	0,0	0,0	0,0
	0,0									
6	3,15830E-01	4,99099E-01	5,21286E-01	2,89094E-01	1,45851E-01	3,87295E-02	0,0	0,0	0,0	0,0
	0,0									
7	2,25039E-01	3,00520E-01	1,68181E-01	7,26286E-01	2,88104E-01	0,0	0,0	0,0	0,0	0,0
	0,0									
8	5,11428E-02	3,31175E-02	8,74165E-01	3,59562E-01	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									
9	0,0	8,85070E-02	1,23416E-01	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0									

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NUCLID = CM246 MAT NO = 7189
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.67679E+00	1.87065E+00	4.68153E+00	3.01992E-03	3.47251E+00	4.39417E-01	8.91193E-01	8.68614E-01
2	7.28616E+00	1.59981E+00	4.10078E+00	4.18108E-03	4.00836E+00	1.67379E+00	2.47278E-05	8.24628E-01
3	7.03591E+00	1.76971E+00	3.75370E+00	6.03028E-03	3.65628E+00	1.60389E+00	0.0	7.33397E-01
4	7.12571E+00	1.74372E+00	3.51661E+00	1.61226E-02	3.48831E+00	1.87756E+00	0.0	6.49130E-01
5	8.04117E+00	1.50298E+00	3.35735E+00	3.88177E-02	4.43452E+00	2.06484E+00	0.0	5.78580E-01
6	8.35136E+00	3.04944E-01	3.26934E+00	8.06251E-02	6.04904E+00	1.91675E+00	0.0	3.48342E-01
7	8.37153E+00	7.95466E-02	3.19818E+00	1.59023E-01	7.22096E+00	9.12008E-01	0.0	2.34953E-01
8	9.47244E+00	6.28241E-02	3.16930E+00	2.06628E-01	8.98615E+00	2.16833E-01	0.0	1.40343E-01
9	1.11965E+01	5.41968E-02	3.15414E+00	2.54760E-01	1.08373E+01	5.02041E-02	0.0	5.95158E-02
10	1.18759E+01	4.98581E-02	3.14674E+00	4.85685E-01	1.13400E+01	3.27381E-04	0.0	2.20156E-02
11	1.21755E+01	4.78333E-02	3.14284E+00	7.87639E-01	1.13400E+01	0.0	0.0	6.38427E-03
12	1.28671E+01	4.68972E-02	3.14091E+00	1.48022E+00	1.13400E+01	0.0	0.0	2.73269E-03
13	1.32862E+01	4.64607E-02	3.13999E+00	1.89978E+00	1.13400E+01	0.0	0.0	2.73269E-03
14	1.34782E+01	4.62582E-02	3.13956E+00	2.09194E+00	1.13400E+01	0.0	0.0	2.73269E-03
15	2.31327E+01	4.61645E-02	3.13935E+00	2.72509E+00	2.03614E+01	0.0	0.0	2.73269E-03
16	3.73196E+01	1.74471E-01	3.13926E+00	6.58526E+00	3.05598E+01	0.0	0.0	2.73269E-03
17	3.40971E+01	1.08519E-01	3.13923E+00	6.17529E+00	2.78133E+01	0.0	0.0	2.73269E-03
18	6.24053E+01	5.41570E-01	3.13922E+00	2.47576E+01	3.71062E+01	0.0	0.0	2.73269E-03
19	2.11767E+01	4.62047E-02	3.13921E+00	3.51555E-02	2.10954E+01	0.0	0.0	2.73269E-03
20	4.13587E+01	1.26265E-01	3.13920E+00	1.93073E+01	2.19251E+01	0.0	0.0	2.73269E-03
21	2.38919E+01	5.06736E-02	3.13920E+00	1.95110E+00	2.18901E+01	0.0	0.0	2.73269E-03
22	1.33348E+02	7.16188E-01	3.13920E+00	1.11045E+02	2.15865E+01	0.0	0.0	2.73269E-03
23	2.09535E+01	4.34421E-02	3.13920E+00	3.72694E-01	2.05373E+01	0.0	0.0	2.73269E-03
24	1.98892E+01	4.17449E-02	3.13920E+00	2.33223E-01	1.96142E+01	0.0	0.0	2.73269E-03
25	1.54051E+01	4.85676E-02	3.13920E+00	3.42445E-01	1.50141E+01	0.0	0.0	5.83503E-03

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM246 MATNO = 7189
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =						
	10000.	1000.	100.	10.	1.	0.	
1	1.0000	1.0000	0.9998	0.9988	0.9971	0.9966	
2	0.9996	0.9996	0.9996	0.9996	0.9995	0.9995	
3	0.9997	0.9997	0.9997	0.9996	0.9994	0.9994	
4	1.0000	1.0000	0.9999	0.9995	0.9988	0.9987	
5	1.0000	1.0000	0.9998	0.9991	0.9981	0.9979	
6	1.0000	0.9999	0.9999	0.9996	0.9993	0.9992	
7	0.9996	0.9996	0.9996	0.9994	0.9993	0.9993	
8	1.0000	0.9999	0.9993	0.9963	0.9932	0.9924	
9	1.0000	1.0000	0.9998	0.9989	0.9981	0.9979	
10	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	
11	1.0000	1.0000	1.0000	0.9999	0.9994	0.9993	
12	1.0000	1.0000	0.9999	0.9996	0.9994	0.9993	
13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
14	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999	
15	0.9995	0.9950	0.9584	0.8387	0.7829	0.7745	
16	0.9974	0.8562	0.7015	0.6417	0.6295	0.6278	
17	0.9987	0.8714	0.7344	0.6973	0.6924	0.6918	
18	0.8922	0.5662	0.3986	0.3585	0.3530	0.3523	
19	1.0000	1.0000	0.9999	0.9998	0.9997	0.9997	
20	0.9692	0.7927	0.6402	0.5831	0.5701	0.5685	
21	0.9999	0.9992	0.9927	0.9682	0.9612	0.9602	
22	0.7578	0.3418	0.2062	0.1767	0.1725	0.1720	
23	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	
24	0.9995	0.9994	0.9987	0.9963	0.9948	0.9945	
25	0.9995	0.9993	0.9980	0.9930	0.9896	0.9890	

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM246 MATNO = 7189
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.34725E+01	0.9997	0.9997	0.9997	0.9987	0.9970	0.9965
2	0.40084E+01	1.0000	1.0000	0.9999	1.0000	0.9999	0.9998
3	0.36563E+01	1.0005	1.0005	1.0006	1.0003	1.0000	0.9999
4	0.34883E+01	1.0000	1.0000	0.9999	0.9996	0.9988	0.9986
5	0.44345E+01	1.0002	1.0002	1.0000	0.9988	0.9975	0.9971
6	0.60490E+01	1.0000	1.0000	0.9999	0.9994	0.9988	0.9986
7	0.72210E+01	0.9998	0.9998	0.9998	1.0001	1.0003	1.0003
8	0.89862E+01	1.0000	1.0000	0.9995	0.9977	0.9954	0.9949
9	0.10837E+02	1.0000	1.0000	0.9999	0.9993	0.9990	0.9988
10	0.11340E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.11340E+02	1.0000	1.0000	1.0000	0.9999	1.0000	1.0000
12	0.11340E+02	1.0000	1.0000	1.0001	1.0000	1.0000	1.0000
13	0.11340E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.11340E+02	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
15	0.20361E+02	0.9997	0.9969	0.9742	0.9033	0.8628	0.8596
16	0.30560E+02	0.9842	0.9123	0.8136	0.7674	0.7573	0.7557
17	0.27813E+02	0.9865	0.9293	0.8533	0.8212	0.8153	0.8146
18	0.37106E+02	0.9423	0.7736	0.6346	0.5861	0.5773	0.5761
19	0.21095E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
20	0.21925E+02	0.9991	0.9943	0.9840	0.9748	0.9723	0.9720
21	0.21890E+02	1.0000	0.9997	0.9986	0.9959	0.9951	0.9949
22	0.21587E+02	0.9884	0.9575	0.9346	0.9274	0.9265	0.9264
23	0.20537E+02	1.0000	1.0000	1.0000	1.0000	1.0002	1.0002
24	0.19614E+02	1.0000	0.9999	0.9996	0.9982	0.9973	0.9971
25	0.15014E+02	1.0002	1.0001	0.9995	0.9965	0.9943	0.9939

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM246 MATNO = 7189
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.30199E-02	0.9998	0.9998	0.9995	0.9976	0.9949	0.9942
2	0.41811E-02	1.0002	1.0002	1.0002	1.0001	0.9996	0.9998
3	0.60303E-02	1.0004	1.0004	1.0006	1.0015	1.0027	1.0030
4	0.16123E-01	1.0012	1.0012	1.0009	0.9990	0.9962	0.9958
5	0.36818E-01	1.0001	1.0001	0.9995	0.9968	0.9929	0.9920
6	0.80625E-01	1.0000	1.0000	0.9996	0.9973	0.9947	0.9940
7	0.15902E+00	1.0001	1.0001	1.0002	1.0007	1.0014	1.0016
8	0.20663E+00	1.0000	1.0000	0.9998	0.9986	0.9975	0.9972
9	0.25476E+00	1.0000	1.0000	0.9996	0.9981	0.9968	0.9965
10	0.48568E+00	1.0000	1.0000	0.9999	0.9994	0.9990	0.9989
11	0.78764E+00	1.0000	1.0000	0.9999	0.9993	0.9988	0.9987
12	0.14802E+01	1.0000	1.0000	0.9996	0.9982	0.9970	0.9967
13	0.18998E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
14	0.20919E+01	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
15	0.27291E+01	0.9999	0.9991	0.9933	0.9750	0.9657	0.9642
16	0.65853E+01	0.9627	0.7743	0.4291	0.2461	0.2129	0.2088
17	0.61723E+01	0.9347	0.6618	0.3073	0.1617	0.1380	0.1351
18	0.24758E+02	0.8757	0.5078	0.2030	0.1019	0.0856	0.0837
19	0.35155E+01	1.0000	1.0000	1.0001	1.0002	1.0003	1.0003
20	0.19307E+02	0.9526	0.7156	0.3738	0.2257	0.1960	0.1922
21	0.19511E+01	0.9985	0.9852	0.8981	0.7356	0.6817	0.6742
22	0.11105E+03	0.8380	0.4152	0.1430	0.0708	0.0593	0.0579
23	0.37269E+00	1.0000	1.0000	1.0001	1.0003	1.0004	1.0004
24	0.23322E+00	1.0003	1.0004	1.0008	1.0031	1.0046	1.0048
25	0.34244E+00	1.0000	1.0001	1.0011	1.0048	1.0075	1.0080

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM246 MATNO = 7189
 REACTION = FISSION
 TEMPERATURE = 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.18706E+01	0.9997	0.9997	0.9999	1.0001	1.0004	1.0005
2	0.15998E+01	1.0003	1.0003	1.0003	1.0003	1.0003	1.0004
3	0.17697E+01	1.0000	1.0000	1.0000	1.0001	1.0003	1.0004
4	0.17437E+01	1.0000	1.0000	0.9999	1.0005	1.0006	1.0006
5	0.15030E+01	1.0000	1.0000	1.0003	1.0014	1.0028	1.0032
6	0.30494E+00	1.0000	1.0001	1.0008	1.0052	1.0103	1.0114
7	0.79547E-01	1.0000	1.0000	0.9999	0.9996	0.9991	0.9990
8	0.62824E-01	1.0000	1.0000	1.0003	1.0017	1.0032	1.0036
9	0.54197E-01	1.0002	1.0000	1.0000	1.0005	1.0009	1.0010
10	0.49858E-01	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
11	0.47833E-01	1.0000	1.0000	1.0000	0.9999	1.0000	1.0000
12	0.46897E-01	1.0000	1.0000	1.0001	1.0000	1.0001	1.0001
13	0.46461E-01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.46258E-01	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
15	0.46165E-01	1.0000	1.0002	1.0000	1.0002	1.0002	1.0002
16	0.17447E+00	0.9618	0.7825	0.5091	0.3826	0.3605	0.3578
17	0.10852E+00	0.9624	0.8050	0.6036	0.5220	0.5087	0.5071
18	0.54157E+00	0.8962	0.5640	0.2681	0.1709	0.1553	0.1534
19	0.46205E-01	1.0000	1.0000	1.0000	1.0001	1.0001	1.0001
20	0.12627E+00	0.9665	0.7995	0.5639	0.4697	0.4519	0.4497
21	0.50674E-01	0.9997	0.9978	0.9846	0.9622	0.9554	0.9544
22	0.71619E+00	0.8445	0.4388	0.1797	0.1132	0.1031	0.1018
23	0.43442E-01	1.0000	1.0000	1.0000	0.9998	0.9998	0.9998
24	0.41745E-01	1.0000	1.0000	0.9998	0.9994	0.9992	0.9992
25	0.48568E-01	1.0000	1.0002	1.0011	1.0043	1.0070	1.0075

NUCLID = CM246 MAT NUMBER = 7189

TABLE OF ELASTIC MATRICES

GROUP I	EXIT GROUP J = 1	** KK **	KK = I + J - 1
1	3.45126E+00	2.12466E-02	
2	3.98641E+00	2.19492E-02	
3	3.63424E+00	2.20461E-02	
4	3.46982E+00	1.84897E-02	
5	4.39431E+00	4.02110E-02	
6	5.99283E+00	5.62039E-02	
7	7.14793E+00	7.30241E-02	
8	8.87846E+00	1.07689E-01	
9	1.07200E+01	1.17270E-01	
10	1.12211E+01	1.18937E-01	
11	1.12189E+01	1.21118E-01	
12	1.12189E+01	1.21078E-01	
13	1.12198E+01	1.20188E-01	
14	1.12189E+01	1.21120E-01	
15	2.00419E+01	3.19521E-01	
16	3.03337E+01	2.26142E-01	
17	2.75579E+01	2.55794E-01	
18	3.68858E+01	2.20354E-01	
19	2.08681E+01	2.27312E-01	
20	2.17006E+01	2.24497E-01	
21	2.16199E+01	2.70133E-01	
22	2.13717E+01	2.14878E-01	
23	2.03158E+01	2.21511E-01	
24	1.94288E+01	1.85466E-01	
25	1.50141E+01	0.0	

NUCLID = CM246 MAT NUMBER = 7189
 TABLE OF INELASTIC (N,2N) MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
J=	1	2	3	4						
	11	12	13							
1	3,69124E-04	6,71783E-03	3,39231E-02	1,52409E-01	2,45048E-01	2,98097E-01	4,65285E-01	5,31276E-01	3,42164E-01	1,23261E-01
	2,32534E-02	0,0	0,0							
2	0,0	5,69792E-02	3,25221E-01	4,83001E-01	4,84727E-01	2,24547E-01	7,15390E-02	2,18507E-02	5,11236E-03	8,13593E-04
	0,0	1,78658E-05	3,15897E-05							
3	3,84047E-02	2,72088E-01	4,62976E-01	4,80995E-01	2,35452E-01	8,13882E-02	2,52342E-02	6,31825E-03	1,02899E-03	0,0
	0,0	0,0	0,0							
4	1,77594E-01	4,73632E-01	6,46165E-01	3,74780E-01	1,42027E-01	4,86452E-02	1,26617E-02	2,05479E-03	0,0	0,0
	0,0	0,0	0,0							
5	2,82798E-01	7,95611E-01	5,92001E-01	2,66496E-01	9,78936E-02	2,57903E-02	4,25349E-03	0,0	0,0	0,0
	0,0	0,0	0,0							
6	4,04630E-01	7,41866E-01	4,91052E-01	2,09684E-01	5,93714E-02	1,01507E-02	0,0	0,0	0,0	0,0
	0,0	0,0	0,0							
7	1,39133E-01	3,85006E-01	2,06513E-01	1,03066E-01	7,82899E-02	0,0	0,0	0,0	0,0	0,0
	0,0	0,0	0,0							
8	1,17911E-02	7,69111E-03	7,27175E-02	1,24633E-01	0,0	0,0	0,0	0,0	0,0	0,0
	0,0	0,0	0,0							
9	2,85202E-04	1,80930E-02	3,18258E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0	0,0	0,0							
10	0,0	0,0	0,0	1,18266E-04	2,09115E-04	0,0	0,0	0,0	0,0	0,0
	0,0	0,0	0,0							

NUCLID = CM247 MAT NO = 7190
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.70367E+00	2.33577E+00	5.00253E+00	1.68013E-03	3.47465E+00	9.20511E-02	7.99517E-01	8.70122E-01	2.08801E-02
2	7.30700E+00	1.98028E+00	4.43663E+00	2.45407E-03	4.00926E+00	1.13040E+00	1.84605E-01	8.29951E-01	2.17945E-02
3	7.01056E+00	2.13619E+00	4.09147E+00	4.22059E-03	3.64174E+00	1.22841E+00	0.0	7.34552E-01	2.18976E-02
4	7.10117E+00	2.16056E+00	3.85571E+00	1.55803E-02	3.50686E+00	1.41817E+00	0.0	6.49005E-01	1.84329E-02
5	8.04714E+00	2.01983E+00	3.69658E+00	3.88177E-02	4.46100E+00	1.52749E+00	0.0	5.78252E-01	4.04582E-02
6	9.38103E+00	1.95756E+00	3.59716E+00	8.06251E-02	6.09904E+00	1.24381E+00	0.0	3.48356E-01	5.64070E-02
7	9.88786E+00	1.92373E+00	3.54085E+00	1.59023E-01	7.27096E+00	5.34146E-01	0.0	2.34951E-01	7.32270E-02
8	1.17544E+01	1.90563E+00	3.51240E+00	2.06628E-01	9.51649E+00	1.25653E-01	0.0	1.39692E-01	1.16876E-01
9	1.33306E+01	1.90041E+00	3.49765E+00	2.54695E-01	1.11488E+01	2.67070E-02	0.0	6.00155E-02	1.16069E-01
10	1.37603E+01	1.94351E+00	3.49024E+00	4.79496E-01	1.13373E+01	0.0	0.0	2.19876E-02	1.19025E-01
11	1.42041E+01	1.98723E+00	3.48689E+00	7.92134E-01	1.14247E+01	0.0	0.0	6.36897E-03	1.21829E-01
12	1.54707E+01	2.52533E+00	3.48532E+00	1.48022E+00	1.14652E+01	0.0	0.0	2.72231E-03	1.22076E-01
13	1.70260E+01	3.64219E+00	3.48462E+00	1.89976E+00	1.14840E+01	0.0	0.0	2.72231E-03	1.21312E-01
14	1.86144E+01	4.63954E+00	3.48429E+00	2.48208E+00	1.14928E+01	0.0	0.0	2.72231E-03	1.22314E-01
15	2.88966E+01	1.05431E+01	3.48413E+00	6.85666E+00	1.14968E+01	0.0	0.0	2.72231E-03	1.22302E-01
16	3.94756E+01	1.69557E+01	3.48406E+00	1.10212E+01	1.14987E+01	0.0	0.0	2.72231E-03	1.21415E-01
17	4.46907E+01	2.01158E+01	3.48403E+00	1.30753E+01	1.14996E+01	0.0	0.0	2.72231E-03	1.22362E-01
18	1.00824E+02	5.29334E+01	3.48401E+00	3.03718E+01	1.15192E+01	0.0	0.0	2.72231E-03	2.02674E-01
19	4.21121E+01	1.31198E+01	3.48401E+00	8.00130E+00	2.09911E+01	0.0	0.0	2.72231E-03	2.23946E-01
20	6.18008E+01	2.29465E+01	3.48400E+00	1.71202E+01	2.17341E+01	0.0	0.0	2.72231E-03	2.30256E-01
21	1.59231E+02	8.25306E+01	3.48400E+00	5.44302E+01	2.22706E+01	0.0	0.0	2.72231E-03	1.86079E-01
22	3.09344E+01	7.46934E+00	3.48400E+00	3.56065E+00	1.99044E+01	0.0	0.0	2.72231E-03	2.19975E-01
23	1.66171E+02	1.06999E+02	3.48400E+00	3.61803E+01	2.29912E+01	0.0	0.0	2.72231E-03	3.07561E-01
24	1.14628E+03	8.37225E+02	3.48400E+00	2.88981E+02	2.00713E+01	0.0	0.0	2.72231E-03	1.65428E-01
25	6.33990E+01	2.35425E+01	3.48400E+00	2.56720E+01	1.41845E+01	0.0	0.0	5.97088E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM247 MATNO = 7190
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9988	0.9968	0.9963
2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0.9998	0.9998	0.9998	0.9997	0.9995	0.9995
4	1.0000	0.9999	0.9999	0.9996	0.9992	0.9991
5	1.0000	1.0000	0.9997	0.9983	0.9963	0.9958
6	1.0000	1.0000	0.9998	0.9991	0.9983	0.9981
7	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
8	1.0000	0.9999	0.9988	0.9939	0.9895	0.9886
9	1.0000	1.0000	0.9999	0.9999	0.9999	0.9999
10	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998
11	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
12	1.0000	1.0000	0.9997	0.9985	0.9977	0.9976
13	1.0000	1.0000	0.9999	0.9995	0.9992	0.9992
14	1.0000	0.9999	0.9994	0.9976	0.9965	0.9963
15	1.0000	0.9992	0.9715	0.9153	0.8954	0.8923
16	0.9993	0.9630	0.6923	0.7910	0.7657	0.7624
17	0.9999	0.9661	0.7749	0.5776	0.5233	0.5156
18	0.9785	0.7861	0.4588	0.2993	0.2692	0.2652
19	0.9795	0.8621	0.6831	0.6051	0.5911	0.5893
20	0.9628	0.7718	0.5241	0.4455	0.4334	0.4319
21	0.8814	0.4880	0.2395	0.1877	0.1805	0.1796
22	0.9999	0.9988	0.9706	0.9375	0.9294	0.9283
23	0.9641	0.7385	0.4209	0.3152	0.2998	0.2980
24	0.8206	0.3474	0.1096	0.0794	0.0765	0.0762
25	0.9999	0.9993	0.9957	0.9904	0.9891	0.9889

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM247 MATNO = 7190
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.34746E+01	0.9996	0.9996	0.9996	0.9983	0.9966	0.9961
2	0.40093E+01	0.9999	0.9999	0.9999	0.9999	0.9998	0.9998
3	0.36417E+01	1.0004	1.0004	1.0004	1.0002	0.9999	0.9999
4	0.35069E+01	1.0000	1.0000	0.9999	0.9998	0.9993	0.9991
5	0.44610E+01	1.0000	1.0000	0.9997	0.9980	0.9964	0.9957
6	0.60990E+01	1.0000	1.0000	0.9998	0.9989	0.9979	0.9979
7	0.72710E+01	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
8	0.95165E+01	1.0000	0.9999	0.9991	0.9956	0.9927	0.9922
9	0.11149E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.11337E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.11425E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.11465E+02	1.0000	1.0000	1.0001	1.0001	1.0002	1.0002
13	0.11484E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
14	0.11493E+02	1.0001	1.0000	1.0001	1.0000	1.0000	0.9999
15	0.11497E+02	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000
16	0.11499E+02	0.9998	0.9999	1.0000	1.0000	1.0000	1.0000
17	0.11500E+02	0.9995	0.9999	1.0000	1.0000	1.0000	1.0000
18	0.17519E+02	0.9921	0.9575	0.9049	0.8715	0.8612	0.8597
19	0.20991E+02	0.9993	0.9946	0.9858	0.9815	0.9807	0.9806
20	0.21734E+02	0.9985	0.9895	0.9759	0.9712	0.9704	0.9703
21	0.22271E+02	0.9957	0.9753	0.9498	0.9387	0.9362	0.9358
22	0.19904E+02	0.9997	1.0002	1.0016	1.0037	1.0044	1.0044
23	0.22991E+02	0.9986	0.9887	0.9655	0.9510	0.9483	0.9480
24	0.20071E+02	0.9784	0.9076	0.8422	0.8240	0.8216	0.8213
25	0.14185E+02	1.0001	1.0003	1.0015	1.0032	1.0036	1.0037

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM247 MATNO = 7190
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.16801E-02	0.9999	0.9999	0.9995	0.9970	0.9935	0.9925
2	0.24541E-02	0.9998	0.9998	0.9998	0.9995	0.9995	0.9994
3	0.42206E-02	1.0001	1.0001	1.0003	1.0015	1.0032	1.0036
4	0.15580E-01	1.0010	1.0010	1.0009	0.9992	0.9968	0.9964
5	0.38818E-01	1.0001	1.0000	0.9992	0.9950	0.9895	0.9881
6	0.80625E-01	1.0000	0.9999	0.9992	0.9952	0.9909	0.9899
7	0.15902E+00	1.0001	1.0001	1.0000	0.9997	0.9995	0.9994
8	0.20663E+00	1.0000	1.0000	0.9997	0.9982	0.9969	0.9966
9	0.25470E+00	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993
10	0.47950E+00	1.0000	1.0000	0.9999	0.9992	0.9986	0.9985
11	0.79213E+00	1.0000	1.0000	0.9998	0.9992	0.9987	0.9986
12	0.14802E+01	1.0000	0.9999	0.9991	0.9962	0.9943	0.9939
13	0.18998E+01	1.0000	1.0000	1.0000	1.0000	0.9998	0.9998
14	0.24821E+01	0.9999	0.9997	0.9982	0.9930	0.9898	0.9892
15	0.68567E+01	0.9993	0.9940	0.9618	0.9052	0.8847	0.8817
16	0.11021E+02	0.9982	0.9838	0.9058	0.8022	0.7737	0.7698
17	0.13075E+02	0.9960	0.9657	0.8150	0.6181	0.5570	0.5482
18	0.30372E+02	0.9761	0.8443	0.5497	0.3525	0.3088	0.3031
19	0.80013E+01	0.9757	0.8302	0.5013	0.3100	0.2733	0.2687
20	0.17120E+02	0.9504	0.7012	0.3379	0.2017	0.1792	0.1765
21	0.54430E+02	0.9254	0.6131	0.2581	0.1411	0.1227	0.1205
22	0.35607E+01	0.9990	0.9910	0.9420	0.8660	0.8445	0.8416
23	0.36180E+02	0.9739	0.8240	0.5223	0.3758	0.3508	0.3478
24	0.28898E+03	0.9049	0.5969	0.3045	0.2224	0.2117	0.2105
25	0.25672E+02	1.0003	0.9998	0.9970	0.9931	0.9920	0.9919

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM247 MATNO = 7190

REACTION = FISSION

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.23358E+01	0.9998	0.9998	0.9998	0.9997	0.9997	0.9997
2	0.19803E+01	0.9998	0.9998	0.9998	0.9998	0.9999	0.9999
3	0.21362E+01	1.0000	1.0000	1.0001	1.0001	1.0003	1.0003
4	0.21606E+01	0.9991	0.9991	0.9995	0.9998	1.0002	1.0003
5	0.20198E+01	1.0000	1.0000	1.0001	1.0003	1.0008	1.0009
6	0.19576E+01	1.0000	1.0000	1.0000	1.0002	1.0005	1.0003
7	0.19237E+01	1.0000	1.0000	1.0000	1.0001	1.0000	1.0000
8	0.19056E+01	1.0000	1.0000	1.0000	1.0001	1.0001	1.0002
9	0.19004E+01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.19435E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
11	0.19872E+01	1.0000	1.0000	1.0000	0.9999	0.9998	1.0000
12	0.25253E+01	1.0000	0.9999	0.9994	0.9970	0.9959	0.9956
13	0.36422E+01	1.0000	1.0000	0.9997	0.9988	0.9982	0.9981
14	0.46395E+01	1.0000	0.9999	0.9996	0.9983	0.9973	0.9971
15	0.10543E+02	0.9993	0.9940	0.9617	0.9050	0.8845	0.8815
16	0.16956E+02	0.9982	0.9838	0.9058	0.8022	0.7737	0.7698
17	0.20116E+02	0.9960	0.9657	0.8150	0.6181	0.5570	0.5482
18	0.52933E+02	0.9771	0.8487	0.5527	0.3515	0.3068	0.3009
19	0.13120E+02	0.9780	0.8479	0.5631	0.3915	0.3545	0.3497
20	0.22946E+02	0.9817	0.8603	0.5283	0.3314	0.2946	0.2900
21	0.82531E+02	0.9240	0.6095	0.2566	0.1408	0.1227	0.1205
22	0.74693E+01	0.9992	0.9924	0.9511	0.8866	0.8682	0.8658
23	0.10700E+03	0.9736	0.8222	0.5174	0.3695	0.3443	0.3412
24	0.83723E+03	0.8995	0.5721	0.2583	0.1702	0.1588	0.1574
25	0.23543E+02	0.9996	0.9995	0.9967	0.9931	0.9921	0.9920

NUCLID = CM247 MAT NUMBER = 7190

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.45377E+00	2.08801E-02		
2	3.98746E+00	2.17945E-02		
3	3.61984E+00	2.18976E-02		
4	3.48842E+00	1.84329E-02		
5	4.42054E+00	4.04581E-02		
6	6.04264E+00	5.64069E-02		
7	7.19773E+00	7.32271E-02		
8	9.39961E+00	1.16876E-01		
9	1.10327E+01	1.16069E-01		
10	1.12182E+01	1.19029E-01		
11	1.13029E+01	1.21830E-01		
12	1.13431E+01	1.22076E-01		
13	1.13627E+01	1.21312E-01		
14	1.13705E+01	1.22314E-01		
15	1.13745E+01	1.22303E-01		
16	1.13773E+01	1.21415E-01		
17	1.13772E+01	1.22362E-01		
18	1.73165E+01	2.02674E-01		
19	2.07671E+01	2.23446E-01		
20	2.15038E+01	2.30255E-01		
21	2.20845E+01	1.86079E-01		
22	1.96844E+01	2.19975E-01		
23	2.26837E+01	3.07562E-01		
24	1.99059E+01	1.65429E-01		
25	1.41845E+01	0.0		

NUCLID = CM247 MAT NUMBER = 7190

TABLE OF INELASTIC MATRICES

GROUP	J=	EXIT	GROUP	**	KK	**	KK	=	I	+ J	=	1	2	3	4	5	6	7	8	9	10	
1	1	11	1,73880E-04	2,43556E-03	1,31426E-02	1,13507E-01	4,03194E-01	5,72421E-01	3,65826E-01	1,51307E-01	5,28657E-02	1,39281E-02	2,28374E-03	3,90499E-02	2,19201E-01	3,27369E-01	3,26438E-01	2,00459E-01	1,87200E-01	1,33399E-01	5,53393E-02	1,11575E-02
2	0,0	0,0	2,93272E-02	2,08275E-01	3,54542E-01	3,66479E-01	1,80430E-01	6,23800E-02	1,93441E-02	4,84295E-03	7,88657E-04	0,0	0,0	1,34603E-01	3,57882E-01	4,87804E-01	2,82889E-01	1,07180E-01	3,67053E-02	9,55418E-03	1,55048E-03	0,0
3	0,0	0,0	2,09838E-01	5,88661E-01	4,37576E-01	1,96896E-01	7,23238E-02	1,90553E-02	3,14260E-03	0,0	0,0	0,0	2,70850E-01	4,81073E-01	3,14193E-01	1,33537E-01	3,77166E-02	6,44106E-03	0,0	0,0	0,0	0,0
4	0,0	0,0	6,12838E-02	2,27592E-01	1,22143E-01	5,94718E-02	4,36557E-02	0,0	0,0	0,0	0,0	0,0	6,11012E-03	4,05949E-03	4,24704E-02	7,30133E-02	0,0	0,0	0,0	0,0	0,0	0,0
5	0,0	0,0	1,39254E-04	9,62559E-03	1,69422E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

NUCLID = CM248 MAT NO = 7191
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.73286E+00	1.88981E+00	4.78823E+00	3.78574E-03	3.48853E+00	3.85301E-01	9.65431E-01	8.68193E-01	2.12473E-02
2	7.34637E+00	1.49990E+00	4.20314E+00	9.40397E-03	4.01614E+00	1.81685E+00	4.07134E-03	8.24442E-01	2.19177E-02
3	7.10375E+00	1.67553E+00	3.83245E+00	2.32776E-02	3.66247E+00	1.74248E+00	0.0	7.32495E-01	2.19800E-02
4	7.22680E+00	1.74832E+00	3.57766E+00	5.81205E-02	3.50179E+00	1.91857E+00	0.0	6.48194E-01	1.84126E-02
5	8.21000E+00	1.55759E+00	3.41126E+00	1.18544E-01	4.47464E+00	2.05923E+00	0.0	5.78333E-01	4.02836E-02
6	8.09861E+00	3.88565E-01	3.31783E+00	1.21153E-01	6.09904E+00	1.48985E+00	0.0	3.48347E-01	5.61811E-02
7	7.99773E+00	7.77647E-02	3.24005E+00	1.25738E-01	7.29864E+00	4.95588E-01	0.0	2.34887E-01	7.34060E-02
8	9.11505E+00	7.87402E-02	3.20813E+00	1.69117E-01	8.75577E+00	1.11429E-01	0.0	1.40800E-01	1.01660E-01
9	1.02815E+01	8.09432E-02	3.19326E+00	2.74704E-01	9.89722E+00	2.36762E-02	0.0	5.98592E-02	1.03951E-01
10	1.08091E+01	8.20525E-02	3.18608E+00	4.52915E-01	1.02741E+01	3.01839E-05	0.0	2.19556E-02	1.08046E-01
11	1.11495E+01	8.25674E-02	3.18281E+00	6.17930E-01	1.04489E+01	0.0	0.0	6.35227E-03	1.11265E-01
12	1.17154E+01	8.28033E-02	3.18132E+00	8.17873E-01	1.08147E+01	0.0	0.0	2.71135E-03	1.17201E-01
13	1.26121E+01	8.29163E-02	3.18062E+00	1.31548E+00	1.12137E+01	0.0	0.0	2.71135E-03	1.19142E-01
14	1.83833E+01	8.29677E-02	3.18030E+00	2.10975E+00	1.61906E+01	0.0	0.0	2.71135E-03	2.98451E-01
15	4.53528E+01	1.85394E-01	3.18014E+00	3.17933E+00	4.19881E+01	0.0	0.0	2.71135E-03	2.14539E-01
16	4.06308E+01	2.77316E-01	3.18007E+00	7.41934E+00	3.29341E+01	0.0	0.0	2.71135E-03	2.13569E+00
17	3.96124E+01	4.88090E-01	3.18003E+00	3.32856E+00	3.59958E+01	0.0	0.0	2.71135E-03	1.85936E-01
18	2.18954E+02	1.04281E+00	3.18002E+00	3.13812E+01	1.86530E+02	0.0	0.0	2.71135E-03	2.98035E-01
19	2.65454E+02	3.52328E+00	3.18001E+00	1.33673E+02	1.28258E+02	0.0	0.0	2.71135E-03	1.79020E-01
20	1.43417E+01	3.91497E-02	3.18000E+00	3.44763E-01	1.39578E+01	0.0	0.0	2.71135E-03	1.29950E-01
21	2.25909E+02	6.36904E+00	3.18000E+00	1.81002E+02	3.45381E+01	0.0	0.0	2.71135E-03	1.45833E-01
22	1.39309E+01	3.07637E-02	3.18000E+00	5.57686E-01	1.33424E+01	0.0	0.0	2.71135E-03	1.52422E-01
23	1.46970E+01	4.49690E-02	3.18000E+00	4.93378E-01	1.41586E+01	0.0	0.0	2.71135E-03	1.44662E-01
24	1.53224E+01	6.59148E-02	3.18000E+00	8.93585E-01	1.43629E+01	0.0	0.0	6.01275E-03	0.0
25	1.37499E+01	9.68431E-02	3.18000E+00	9.00259E-01	1.27528E+01	0.0	0.0		

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM248 MATNO = 7191
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	0.9999	0.9999	0.9997	0.9984	0.9964	0.9958
2	0.9996	0.9996	0.9996	0.9996	0.9995	0.9995
3	0.9997	0.9997	0.9997	0.9996	0.9995	0.9994
4	0.9999	0.9999	0.9998	0.9993	0.9986	0.9985
5	1.0000	1.0000	0.9998	0.9990	0.9980	0.9977
6	0.9996	0.9995	0.9995	0.9992	0.9989	0.9988
7	0.9998	0.9998	0.9998	0.9997	0.9996	0.9996
8	1.0000	1.0000	0.9995	0.9973	0.9947	0.9940
9	1.0000	1.0000	0.9999	0.9997	0.9994	0.9994
10	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
11	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	1.0000	1.0000	0.9999	0.9997	0.9994	0.9994
13	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
14	0.9997	0.9971	0.9761	0.9147	0.8860	0.8816
15	0.9548	0.7567	0.5827	0.5229	0.5089	0.5069
16	0.9933	0.8056	0.5882	0.5308	0.5216	0.5204
17	0.9988	0.9676	0.8238	0.7040	0.6783	0.6750
18	0.5497	0.2809	0.1856	0.1174	0.1020	0.1001
19	0.5949	0.3139	0.2074	0.1416	0.1252	0.1230
20	1.0000	0.9998	0.9962	0.9720	0.9565	0.9537
21	0.5937	0.2528	0.1326	0.0864	0.0776	0.0764
22	1.0000	1.0000	0.9999	0.9995	0.9992	0.9992
23	0.9999	0.9999	0.9999	0.9998	0.9997	0.9997
24	0.9998	0.9998	0.9997	0.9990	0.9986	0.9985
25	0.9998	0.9997	0.9996	0.9990	0.9985	0.9985

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM248 MATNO = 7191
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.34885E+01	1.0001	1.0001	0.9999	0.9986	0.9969	0.9964
2	0.40161E+01	1.0006	1.0006	1.0006	1.0005	1.0005	1.0005
3	0.36625E+01	1.0007	1.0007	1.0006	1.0003	0.9999	0.9998
4	0.35018E+01	1.0001	1.0001	1.0000	0.9995	0.9989	0.9988
5	0.44746E+01	1.0006	1.0005	1.0003	0.9991	0.9976	0.9973
6	0.60990E+01	1.0000	1.0000	1.0001	1.0006	1.0013	1.0014
7	0.72986E+01	0.9998	0.9998	0.9998	0.9998	0.9996	0.9996
8	0.87558E+01	1.0001	1.0001	0.9998	0.9983	0.9970	0.9967
9	0.98972E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
10	0.10274E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.10449E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.10815E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
13	0.11214E+02	1.0000	1.0000	1.0000	1.0001	1.0000	0.9999
14	0.16191E+02	0.9998	0.9979	0.9833	0.9374	0.9144	0.9107
15	0.41988E+02	0.9685	0.8385	0.6700	0.5973	0.5825	0.5801
16	0.32934E+02	0.9788	0.8753	0.7155	0.6474	0.6347	0.6328
17	0.35996E+02	0.9974	0.9778	0.8971	0.8114	0.7895	0.7865
18	0.18653E+03	0.7179	0.4061	0.2687	0.1985	0.1788	0.1761
19	0.12826E+03	0.8031	0.5714	0.4456	0.3684	0.3460	0.3428
20	0.13958E+02	0.9999	0.9994	0.9958	0.9824	0.9735	0.9718
21	0.38538E+02	0.8898	0.7184	0.5843	0.4875	0.4570	0.4525
22	0.13342E+02	1.0000	1.0000	0.9999	0.9997	0.9997	0.9996
23	0.14159E+02	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
24	0.14363E+02	1.0002	1.0002	0.9999	0.9999	0.9998	0.9996
25	0.12753E+02	1.0000	1.0000	1.0002	0.9994	0.9988	0.9987

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM248 MATNO = 7191
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.37857E-02	0.9997	0.9997	0.9991	0.9962	0.9917	0.9905
2	0.94040E-02	1.0000	1.0000	0.9999	0.9994	0.9987	0.9985
3	0.23278E-01	1.0000	1.0000	1.0002	1.0014	1.0029	1.0033
4	0.58121E-01	1.0001	1.0001	0.9996	0.9972	0.9939	0.9932
5	0.11854E+00	1.0000	1.0000	0.9997	0.9981	0.9960	0.9955
6	0.12115E+00	1.0000	1.0000	0.9999	0.9996	0.9992	0.9991
7	0.12574E+00	1.0002	1.0002	1.0001	0.9999	0.9995	0.9995
8	0.16912E+00	0.9998	0.9997	0.9993	0.9973	0.9948	0.9942
9	0.27970E+00	1.0000	1.0000	0.9997	0.9982	0.9967	0.9964
10	0.45292E+00	1.0000	1.0000	0.9998	0.9996	0.9993	0.9993
11	0.61795E+00	1.0000	1.0000	0.9999	0.9996	0.9993	0.9992
12	0.81787E+00	1.0000	1.0000	0.9999	0.9993	0.9987	0.9986
13	0.13155E+01	1.0000	0.9999	0.9993	0.9970	0.9952	0.9948
14	0.21097E+01	0.9999	0.9987	0.9904	0.9643	0.9510	0.9488
15	0.31793E+01	0.9593	0.7625	0.4054	0.2245	0.1930	0.1891
16	0.74193E+01	0.9581	0.7398	0.3466	0.1726	0.1444	0.1411
17	0.33286E+01	0.9924	0.9359	0.6861	0.4470	0.3945	0.3878
18	0.31381E+02	0.6295	0.2277	0.0778	0.0376	0.0301	0.0291
19	0.13367E+03	0.6704	0.2734	0.1025	0.0534	0.0470	0.0460
20	0.34476E+00	1.0000	0.9995	0.9961	0.9858	0.9811	0.9804
21	0.18100E+03	0.7146	0.3085	0.1160	0.0535	0.0417	0.0402
22	0.55769E+00	1.0000	1.0001	1.0005	1.0021	1.0033	1.0035
23	0.49338E+00	1.0001	1.0001	1.0000	0.9998	0.9996	0.9996
24	0.89358E+00	1.0000	1.0000	0.9993	0.9968	0.9952	0.9948
25	0.90026E+00	1.0000	1.0001	1.0003	1.0015	1.0024	1.0025

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CM248 MATNO = 7191
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.18898E+01	1.0000	1.0000	0.9999	0.9998	0.9997	0.9996
2	0.14999E+01	1.0002	1.0002	1.0002	1.0003	1.0004	1.0004
3	0.16755E+01	1.0001	1.0001	1.0001	1.0003	1.0004	1.0005
4	0.17483E+01	1.0001	1.0001	1.0000	0.9995	1.0002	1.0002
5	0.15576E+01	1.0001	1.0001	1.0003	1.0014	1.0031	1.0036
6	0.38857E+00	1.0000	0.9999	0.9990	0.9940	0.9882	0.9868
7	0.77765E-01	1.0000	1.0000	1.0000	1.0001	1.0003	1.0004
8	0.78740E-01	1.0001	1.0001	1.0001	1.0002	0.9998	0.9998
9	0.80943E-01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.82053E-01	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
11	0.82567E-01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.82805E-01	1.0000	1.0000	1.0000	1.0001	1.0001	1.0000
13	0.82916E-01	1.0000	1.0000	1.0000	1.0002	1.0000	1.0000
14	0.82968E-01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.18539E+00	0.9800	0.8854	0.7235	0.6418	0.6251	0.6229
16	0.27732E+00	0.9648	0.7825	0.4560	0.3133	0.2908	0.2881
17	0.48809E+00	0.9986	0.9888	0.9336	0.8289	0.7874	0.7812
18	0.10428E+01	0.6490	0.2693	0.1327	0.1032	0.0990	0.0985
19	0.35233E+01	0.6759	0.2831	0.1148	0.0712	0.0641	0.0632
20	0.39150E-01	1.0000	1.0001	1.0015	1.0100	1.0179	1.0196
21	0.63690E+01	0.7145	0.3084	0.1159	0.0534	0.0416	0.0400
22	0.30764E-01	0.9997	0.9999	0.9997	0.9985	0.9977	0.9978
23	0.44969E-01	1.0000	1.0000	0.9999	0.9992	0.9988	0.9987
24	0.65915E-01	1.0001	1.0001	1.0002	1.0006	1.0009	1.0010
25	0.96843E-01	1.0000	1.0001	1.0004	1.0014	1.0024	1.0025

NUCLID = CM248 MAT NUMBER = 7191

TABLE OF ELASTIC MATRICES

GROUP	EXT	GROUP	** KK **	KK = I + J - 1
1	J= 1	2		
1	3.46729E+00	2.12472E-02		
2	3.99423E+00	2.19177E-02		
3	3.64049E+00	2.19799E-02		
4	3.48338E+00	1.84126E-02		
5	4.43435E+00	4.02835E-02		
6	6.04286E+00	5.61811E-02		
7	7.22524E+00	7.34059E-02		
8	8.65410E+00	1.01661E-01		
9	9.79327E+00	1.03951E-01		
10	1.01660E+01	1.08046E-01		
11	1.03377E+01	1.11266E-01		
12	1.06975E+01	1.17201E-01		
13	1.10946E+01	1.19143E-01		
14	1.58922E+01	2.98451E-01		
15	4.17488E+01	2.39323E-01		
16	3.27196E+01	2.14539E-01		
17	3.38601E+01	2.13569E+00		
18	1.86344E+02	1.85936E-01		
19	1.27960E+02	2.98037E-01		
20	1.37788E+01	1.79020E-01		
21	3.84082E+01	1.29950E-01		
22	1.31966E+01	1.45833E-01		
23	1.40062E+01	1.52422E-01		
24	1.42182E+01	1.44662E-01		
25	1.27528E+01	0.0		

NUCLID = CM248 MAT NUMBER = 7191
 TABLE OF INELA+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
		1	2	3	4						
		11	12	13							
1	4,53837E-04	7.17339E-03	2.65239E-02	2.30751E-01	5.09198E-01	5.96115E-01	4.21306E-01	3.18148E-01	1.49860E-01	4.80798E-02	
	8.25247E-03	0.0	0.0								
2	0.0	6.41717E-02	3.52941E-01	5.23537E-01	5.25245E-01	2.43294E-01	7.75473E-02	2.36857E-02	5.54200E-03	8.81989E-04	
	0.0	2.94154E-03	5.20114E-03								
3	4.19051E-02	2.95846E-01	5.03085E-01	5.22374E-01	2.55587E-01	8.83265E-02	2.73786E-02	6.85626E-03	1.11674E-03	0.0	
	0.0	0.0	0.0								
4	1.83256E-01	4.84507E-01	6.59267E-01	3.82233E-01	1.44754E-01	4.95623E-02	1.29013E-02	2.09354E-03	0.0	0.0	
	0.0	0.0	0.0								
5	2.82448E-01	7.93519E-01	5.90150E-01	2.65605E-01	9.75644E-02	2.57043E-02	4.23933E-03	0.0	0.0	0.0	
	0.0	0.0	0.0								
6	3.37783E-01	5.75381E-01	3.69303E-01	1.55984E-01	4.39099E-02	7.48763E-03	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
7	7.51845E-02	2.09167E-01	1.12230E-01	5.61757E-02	4.28301E-02	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
8	6.06916E-03	3.93041E-03	3.73694E-02	6.40601E-02	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
9	1.31192E-04	8.53282E-03	1.50122E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								
10	0.0	0.0	0.0	1.09039E-05	1.92799E-05	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0								

NUCLID = BK249 MAT NO = 7192
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.78465E+00	1.52877E+00	4.90781E+00	3.78574E-03	3.48853E+00	6.79863E-01	1.08369E+00	8.69845E-01	2.09770E-02
2	7.37205E+00	1.25434E+00	4.27212E+00	9.40397E-03	4.01614E+00	2.08847E+00	3.69336E-03	8.24199E-01	2.19542E-02
3	7.18768E+00	1.33119E+00	3.89175E+00	2.32776E-02	3.66247E+00	2.17074E+00	0.0	7.32066E-01	2.18824E-02
4	7.24514E+00	1.22633E+00	3.63301E+00	5.81206E-02	3.50179E+00	2.45890E+00	0.0	6.48969E-01	1.82720E-02
5	7.82534E+00	7.17293E-01	3.46506E+00	1.18544E-01	4.47464E+00	2.51487E+00	0.0	5.79632E-01	4.01232E-02
6	8.32000E+00	5.35275E-02	3.36658E+00	1.21153E-01	6.09904E+00	2.04628E+00	0.0	3.48338E-01	5.59567E-02
7	8.34331E+00	1.09431E-02	3.28007E+00	1.25738E-01	7.29864E+00	9.07991E-01	0.0	2.34876E-01	7.31127E-02
8	9.15601E+00	1.30279E-02	3.24946E+00	1.69117E-01	8.75577E+00	2.18102E-01	0.0	1.40789E-01	1.01255E-01
9	1.02326E+01	1.56282E-02	3.23371E+00	2.79704E-01	9.89722E+00	4.00605E-02	0.0	5.98478E-02	1.03536E-01
10	1.07459E+01	1.89421E-02	3.22576E+00	4.52915E-01	1.02741E+01	0.0	0.0	2.19441E-02	1.07614E-01
11	1.10892E+01	2.23360E-02	3.22209E+00	6.17950E-01	1.04489E+01	0.0	0.0	6.34091E-03	1.10821E-01
12	1.16586E+01	2.60213E-02	3.22038E+00	8.17873E-01	1.08147E+01	0.0	0.0	2.70048E-03	1.16733E-01
13	1.25596E+01	3.03486E-02	3.21959E+00	1.31548E+00	1.12137E+01	0.0	0.0	2.70048E-03	1.18665E-01
14	1.36590E+01	3.53348E-02	3.21922E+00	2.10975E+00	1.15139E+01	0.0	0.0	2.70048E-03	1.25448E-01
15	1.86451E+01	4.11237E-02	3.21905E+00	6.24195E+00	1.23620E+01	0.0	0.0	2.70048E-03	1.35628E-01
16	2.69179E+01	4.78723E-02	3.21897E+00	1.35006E+01	1.33694E+01	0.0	0.0	2.70048E-03	1.45746E-01
17	3.63994E+01	5.43894E-02	3.21893E+00	2.18884E+01	1.44565E+01	0.0	0.0	2.70048E-03	1.58238E-01
18	5.12405E+01	6.10970E-02	3.21891E+00	3.53923E+01	1.57871E+01	0.0	0.0	2.70048E-03	1.75009E-01
19	7.46531E+01	6.84818E-02	3.21891E+00	5.71343E+01	1.74502E+01	0.0	0.0	2.70048E-03	1.92225E-01
20	1.35631E+02	7.69057E-02	3.21890E+00	1.14438E+02	2.41170E+01	0.0	0.0	2.70048E-03	7.33795E-01
21	4.48505E+02	8.63538E-02	3.21890E+00	3.96667E+02	5.17508E+01	0.0	0.0	2.70048E-03	2.04374E-01
22	5.65493E+02	9.74751E-02	3.21890E+00	5.26746E+02	3.86500E+01	0.0	0.0	2.70048E-03	2.28968E-01
23	7.31934E+02	1.32504E-01	3.21890E+00	6.95212E+02	3.65895E+01	0.0	0.0	2.70048E-03	2.25160E-01
24	3.42928E+03	1.94323E-01	3.21890E+00	3.31527E+03	1.13816E+02	0.0	0.0	2.70048E-03	1.43158E+00
25	5.52578E+02	2.84926E-01	3.21890E+00	4.57063E+02	9.52295E+01	0.0	0.0	5.07706E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = BK249 MATNO = 7192
 REACTION = TOTAL
 TEMPERATURE = 300, K

GROUP	10000,	1000,	SIGMA 0 = 100,	10,	1,	0,
1	1.0000	1.0000	0.9998	0.9989	0.9971	0.9966
2	0.9996	0.9996	0.9996	0.9996	0.9995	0.9995
3	0.9996	0.9996	0.9996	0.9995	0.9994	0.9994
4	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996
5	1.0000	1.0000	1.0000	0.9998	0.9995	0.9994
6	0.9999	0.9999	0.9998	0.9996	0.9992	0.9992
7	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
8	1.0000	1.0000	0.9996	0.9978	0.9956	0.9951
9	1.0000	0.9999	0.9999	0.9997	0.9994	0.9994
10	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
11	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
12	1.0000	1.0000	0.9999	0.9997	0.9994	0.9994
13	1.0000	1.0000	0.9999	0.9993	0.9989	0.9988
14	1.0000	1.0000	0.9996	0.9981	0.9968	0.9966
15	0.9999	0.9993	0.9941	0.9760	0.9656	0.9638
16	1.0000	0.9997	0.9975	0.9910	0.9879	0.9875
17	0.9999	0.9995	0.9960	0.9878	0.9847	0.9842
18	0.9999	0.9991	0.9932	0.9827	0.9796	0.9792
19	0.9998	0.9984	0.9895	0.9781	0.9755	0.9752
20	0.9916	0.9373	0.8399	0.8112	0.8076	0.8072
21	0.7813	0.4012	0.1840	0.1342	0.1285	0.1278
22	0.6079	0.2189	0.1236	0.1063	0.1040	0.1037
23	0.5062	0.1915	0.1202	0.1075	0.1060	0.1058
24	0.4102	0.1492	0.0670	0.0522	0.0506	0.0504
25	0.9997	0.9980	0.9952	0.9945	0.9944	0.9944

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = BK249 MATNO = 7192
 REACTION = ELASTIC
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,34885E+01	0,9996	0,9995	0,9993	0,9983	0,9969	0,9964
2	0,40161E+01	1,0006	1,0006	1,0006	1,0005	1,0005	1,0005
3	0,36625E+01	1,0007	1,0007	1,0006	1,0004	1,0001	1,0000
4	0,35018E+01	1,0001	1,0001	1,0001	0,9998	0,9995	0,9994
5	0,44746E+01	1,0006	1,0005	1,0004	0,9998	0,9989	0,9987
6	0,60990E+01	0,9999	0,9998	0,9998	0,9993	0,9988	0,9986
7	0,72986E+01	0,9999	0,9999	0,9999	0,9999	1,0001	1,0001
8	0,87558E+01	1,0000	1,0000	0,9998	0,9986	0,9975	0,9972
9	0,98972E+01	1,0000	1,0000	1,0000	0,9999	0,9998	0,9998
10	0,10274E+02	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000
11	0,10449E+02	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000
12	0,10815E+02	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000
13	0,11214E+02	1,0000	1,0000	1,0000	1,0001	1,0002	1,0002
14	0,11514E+02	1,0000	1,0000	0,9999	0,9997	0,9995	0,9995
15	0,12362E+02	1,0002	1,0001	0,9994	0,9980	0,9971	0,9970
16	0,13369E+02	1,0000	1,0000	0,9998	0,9989	0,9985	0,9984
17	0,14457E+02	1,0000	0,9999	0,9998	0,9988	0,9985	0,9984
18	0,15787E+02	0,9998	0,9996	0,9989	0,9977	0,9971	0,9971
19	0,17450E+02	1,0002	1,0000	0,9988	0,9971	0,9968	0,9967
20	0,24117E+02	0,9954	0,9646	0,8922	0,8639	0,8600	0,8596
21	0,51751E+02	0,9516	0,8178	0,6619	0,5963	0,5864	0,5852
22	0,38650E+02	0,8831	0,6842	0,5904	0,5701	0,5674	0,5671
23	0,36589E+02	0,8392	0,6489	0,5750	0,5599	0,5579	0,5577
24	0,11382E+03	0,8367	0,6468	0,4617	0,4006	0,3926	0,3917
25	0,95229E+02	1,0005	1,0038	1,0098	1,0112	1,0114	1,0114

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = BK249 MATNO = 7192
 REACTION = CAPTURE
 TEMPERATURE= 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,37857E-02	0,9997	0,9997	0,9992	0,9964	0,9922	0,9911
2	0,94040E-02	1,0000	1,0000	0,9998	0,9992	0,9984	0,9981
3	0,23278E-01	1,0000	1,0000	1,0002	1,0013	1,0027	1,0030
4	0,58121E-01	1,0001	1,0001	0,9998	0,9982	0,9964	0,9960
5	0,11854E+00	1,0000	1,0000	0,9998	0,9990	0,9978	0,9975
6	0,12115E+00	1,0000	1,0000	1,0000	1,0004	1,0008	1,0009
7	0,12574E+00	1,0002	1,0002	1,0002	1,0003	1,0004	1,0004
8	0,16912E+00	0,9999	0,9998	0,9994	0,9974	0,9953	0,9948
9	0,27970E+00	1,0000	1,0000	0,9997	0,9983	0,9970	0,9967
10	0,45292E+00	1,0000	0,9998	0,9998	0,9996	0,9994	0,9993
11	0,61795E+00	1,0000	1,0000	0,9999	0,9995	0,9992	0,9992
12	0,81787E+00	1,0000	1,0000	0,9998	0,9992	0,9987	0,9986
13	0,13155E+01	0,9997	0,9996	0,9992	0,9969	0,9951	0,9947
14	0,21097E+01	1,0001	1,0000	0,9990	0,9950	0,9921	0,9916
15	0,62420E+01	0,9999	0,9991	0,9922	0,9678	0,9531	0,9506
16	0,13501E+02	1,0001	0,9998	0,9977	0,9918	0,9891	0,9887
17	0,21888E+02	1,0000	0,9995	0,9966	0,9901	0,9876	0,9873
18	0,35392E+02	0,9999	0,9992	0,9951	0,9879	0,9858	0,9855
19	0,57134E+02	0,9999	0,9989	0,9932	0,9861	0,9845	0,9843
20	0,11144E+03	0,9956	0,9659	0,8940	0,8636	0,8593	0,8589
21	0,39667E+03	0,8650	0,5316	0,2679	0,1791	0,1660	0,1645
22	0,52675E+03	0,7568	0,3481	0,1563	0,1143	0,1088	0,1081
23	0,69521E+03	0,6792	0,2991	0,1508	0,1204	0,1165	0,1161
24	0,33153E+04	0,5926	0,2689	0,1435	0,1146	0,1109	0,1105
25	0,45706E+03	0,9997	0,9981	0,9953	0,9945	0,9944	0,9944

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = BK249 MATNO = 7192
 REACTION = FISSION
 TEMPERATURE = 300, K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000,	1000,	100,	10,	1,	0,
1	0,15288E+01	1,0000	1,0000	1,0001	1,0004	1,0008	1,0009
2	0,12543E+01	1,0001	1,0001	1,0001	1,0001	0,9999	1,0000
3	0,13312E+01	1,0004	1,0004	1,0004	1,0005	1,0005	1,0005
4	0,12263E+01	1,0000	1,0000	1,0000	1,0005	1,0010	1,0012
5	0,71729E+00	1,0000	1,0001	1,0005	1,0026	1,0052	1,0060
6	0,53527E-01	1,0000	1,0001	1,0013	1,0079	1,0155	1,0173
7	0,10943E-01	1,0000	1,0000	1,0000	1,0001	1,0002	1,0002
8	0,13028E-01	1,0000	1,0000	0,9998	0,9989	0,9978	0,9976
9	0,15628E-01	1,0001	1,0001	1,0001	0,9997	0,9991	0,9991
10	0,18942E-01	1,0000	1,0000	0,9999	0,9997	0,9995	0,9995
11	0,22336E-01	1,0000	1,0000	1,0000	0,9998	0,9999	0,9998
12	0,26021E-01	0,9999	0,9999	0,9999	0,9995	0,9992	0,9991
13	0,30349E-01	0,9999	0,9999	0,9998	0,9992	0,9989	0,9988
14	0,35335E-01	1,0000	1,0001	0,9999	0,9990	0,9984	0,9983
15	0,41124E-01	1,0001	1,0000	0,9993	0,9961	0,9945	0,9943
16	0,47872E-01	1,0000	0,9999	0,9994	0,9977	0,9969	0,9968
17	0,54389E-01	0,9999	0,9999	0,9993	0,9976	0,9971	0,9970
18	0,61097E-01	1,0000	0,9995	0,9988	0,9972	0,9967	0,9967
19	0,68482E-01	1,0002	0,9999	0,9984	0,9965	0,9963	0,9963
20	0,76906E-01	0,9998	0,9986	0,9952	0,9931	0,9929	0,9929
21	0,86354E-01	0,9998	1,0010	1,0062	1,0086	1,0089	1,0089
22	0,97475E-01	1,0001	1,0019	1,0035	1,0038	1,0038	1,0037
23	0,13250E+00	1,0041	1,0132	1,0272	1,0347	1,0360	1,0361
24	0,19432E+00	0,9940	0,9711	0,9275	0,9100	0,9076	0,9073
25	0,28493E+00	0,9998	0,9981	0,9949	0,9942	0,9941	0,9941

NUCLID = BK249 MAT NUMBER = 7192

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP ** KK **		KK = I + J - 1
	J=1	J=2	
1	3,46756E+00	2,09769E-02	
2	3,99419E+00	2,19542E-02	
3	3,64058E+00	2,18823E-02	
4	3,48352E+00	1,82721E-02	
5	4,43451E+00	4,01231E-02	
6	6,04309E+00	5,59568E-02	
7	7,22553E+00	7,31127E-02	
8	8,65451E+00	1,01255E-01	
9	9,79369E+00	1,03536E-01	
10	1,01665E+01	1,07615E-01	
11	1,03381E+01	1,10821E-01	
12	1,06980E+01	1,16733E-01	
13	1,10951E+01	1,18665E-01	
14	1,13884E+01	1,25447E-01	
15	1,22264E+01	1,35628E-01	
16	1,32236E+01	1,45746E-01	
17	1,42983E+01	1,58238E-01	
18	1,56121E+01	1,75008E-01	
19	1,72580E+01	1,92225E-01	
20	2,33832E+01	7,33795E-01	
21	5,15465E+01	2,04374E-01	
22	3,84210E+01	2,28968E-01	
23	3,63643E+01	2,25160E-01	
24	1,12384E+02	1,43158E+00	
25	9,52295E+01	0,0	

NUCLID = BK249 MAT NUMBER = 7192

TABLE OF INELA*(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	**	KK	**	KK	**	1 + J - 1	4	5	6	7	8	9	10
1	1	11	1	2	12	2	3	3	3	4	5	6	7	8	9	10
							13									
1	8,14770E-04	1,25264E-02	5,63006E-02	2,89615E-01	3,87017E-01	5,06595E-01	6,93214E-01	5,31865E-01	2,71144E-01	2,71144E-01	8,33565E-02	1,48032E-02	0,0	0,0	0,0	0,0
2	0,0	7,37873E-02	4,05685E-01	6,03882E-01	6,03719E-01	2,79625E-01	8,91570E-02	2,72321E-02	6,37192E-03	1,01407E-03	0,0	0,0	0,0	0,0	0,0	0,0
3	0,0	2,66845E-03	4,71826E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
3	5,15669E-02	3,67697E-01	6,26372E-01	6,51405E-01	3,19136E-01	1,10367E-01	3,42343E-02	8,56939E-03	1,39529E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0
4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
4	2,35211E-01	6,21060E-01	8,44732E-01	4,89743E-01	1,85449E-01	6,34927E-02	1,65278E-02	2,68203E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5	3,50486E-01	9,69864E-01	7,17628E-01	3,22216E-01	1,18342E-01	3,11911E-02	5,14348E-03	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
6	4,43581E-01	7,91610E-01	5,17945E-01	2,20276E-01	6,22368E-02	1,06301E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
7	1,34132E-01	3,81564E-01	2,04993E-01	1,04962E-01	8,23395E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
8	1,14318E-02	7,38517E-03	7,33596E-02	1,25925E-01	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
9	2,08881E-04	1,44384E-02	2,54132E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

NUCLID = CF249 MAT NO = 7193
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.78172E+00	2.15743E+00	5.57714E+00	3.78574E-03	3.48853E+00	2.64637E-01	8.67330E-01	8.69844E-01	2.09711E-02
2	7.35258E+00	1.80428E+00	4.96435E+00	9.40397E-03	4.01614E+00	1.46121E+00	6.15424E-02	8.24199E-01	2.19481E-02
3	7.10034E+00	1.89366E+00	4.59128E+00	2.32776E-02	3.66247E+00	1.52094E+00	0.0	7.32066E-01	2.18761E-02
4	7.12241E+00	1.75840E+00	4.33219E+00	5.81206E-02	3.50179E+00	1.80409E+00	0.0	6.48969E-01	1.82669E-02
5	7.86041E+00	1.42057E+00	4.15534E+00	1.18544E-01	4.47464E+00	1.84666E+00	0.0	5.79631E-01	4.01120E-02
6	9.24146E+00	1.51081E+00	4.04298E+00	1.21153E-01	6.09904E+00	1.51045E+00	0.0	3.48338E-01	5.59410E-02
7	9.68083E+00	1.83171E+00	3.98179E+00	1.25738E-01	7.29864E+00	4.24737E-01	0.0	2.34876E-01	7.30921E-02
8	1.11827E+01	2.19383E+00	3.95162E+00	1.69117E-01	8.75577E+00	6.40200E-02	0.0	1.40789E-01	1.01227E-01
9	1.26234E+01	2.43046E+00	3.93646E+00	2.79704E-01	9.89722E+00	1.60387E-02	0.0	5.98475E-02	1.03507E-01
10	1.34596E+01	2.73260E+00	3.92940E+00	4.52915E-01	1.02741E+01	2.04471E-05	0.0	2.19437E-02	1.07585E-01
11	1.44373E+01	3.37041E+00	3.92582E+00	6.17950E-01	1.04489E+01	0.0	0.0	6.34043E-03	1.10790E-01
12	1.83385E+01	4.23969E+00	3.92414E+00	8.17873E-01	1.32809E+01	0.0	0.0	2.69971E-03	1.49441E-01
13	2.24964E+01	6.63236E+00	3.92337E+00	1.31548E+00	1.45485E+01	0.0	0.0	2.69971E-03	1.56016E-01
14	2.69654E+01	9.39661E+00	3.92301E+00	2.36833E+00	1.52003E+01	0.0	0.0	2.69971E-03	1.63456E-01
15	3.58391E+01	1.33497E+01	3.92284E+00	6.67237E+00	1.58220E+01	0.0	0.0	2.69971E-03	1.70690E-01
16	5.34076E+01	2.45586E+01	3.92277E+00	1.22793E+01	1.65697E+01	0.0	0.0	2.69971E-03	1.77467E-01
17	6.37901E+01	3.10188E+01	3.92268E+00	1.55094E+01	1.72619E+01	0.0	0.0	2.69971E-03	1.86084E-01
18	8.55626E+01	4.26945E+01	3.92271E+00	1.75040E+01	2.53641E+01	0.0	0.0	2.69971E-03	2.40532E-01
19	1.23481E+02	6.66176E+01	3.92271E+00	3.06487E+01	2.62150E+01	0.0	0.0	2.69971E-03	4.74435E-01
20	1.23459E+02	6.23593E+01	3.92270E+00	3.88897E+01	2.22095E+01	0.0	0.0	2.69971E-03	2.05571E-01
21	1.30681E+02	8.08033E+01	3.92270E+00	3.07082E+01	1.91695E+01	0.0	0.0	2.69971E-03	1.80161E-01
22	1.01722E+02	4.04914E+01	3.92270E+00	4.33328E+01	1.78974E+01	0.0	0.0	2.69971E-03	2.01715E-01
23	2.39991E+02	1.54049E+02	3.92270E+00	6.34370E+01	2.25054E+01	0.0	0.0	2.69971E-03	3.05785E-01
24	2.55345E+03	2.43885E+03	3.92270E+00	9.29475E+01	2.17493E+01	0.0	0.0	2.69971E-03	1.87079E-01
25	6.57868E+02	5.05841E+02	3.92270E+00	1.36304E+02	1.57233E+01	0.0	0.0	5.83961E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF249 MATNO = 7193

REACTION = TOTAL

TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9988	0.9969	0.9963
2	0.9996	0.9996	0.9996	0.9996	0.9995	0.9995
3	0.9997	0.9997	0.9997	0.9996	0.9994	0.9994
4	0.9999	0.9999	0.9999	0.9998	0.9996	0.9996
5	1.0000	1.0000	0.9998	0.9986	0.9968	0.9963
6	1.0000	0.9999	0.9998	0.9990	0.9981	0.9979
7	1.0000	1.0000	1.0000	0.9998	0.9997	0.9996
8	1.0000	0.9999	0.9994	0.9970	0.9945	0.9940
9	1.0000	1.0000	0.9999	0.9996	0.9994	0.9993
10	1.0000	1.0000	0.9999	0.9996	0.9993	0.9992
11	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
12	1.0000	0.9998	0.9980	0.9914	0.9872	0.9864
13	1.0000	0.9998	0.9985	0.9943	0.9922	0.9918
14	0.9999	0.9992	0.9863	0.9596	0.9501	0.9488
15	1.0000	0.9983	0.9618	0.9021	0.8833	0.8807
16	0.9996	0.9778	0.8696	0.7499	0.7197	0.7157
17	0.9986	0.9558	0.7958	0.6622	0.6313	0.6272
18	0.9870	0.8887	0.6621	0.5378	0.5135	0.5104
19	0.9673	0.7820	0.4796	0.3590	0.3408	0.3386
20	0.8916	0.5822	0.3876	0.3230	0.3107	0.3092
21	0.9522	0.7504	0.5116	0.3895	0.3684	0.3658
22	0.9969	0.9600	0.8653	0.8249	0.8194	0.8187
23	0.9824	0.8635	0.6421	0.5774	0.5692	0.5683
24	0.9350	0.7292	0.6199	0.6029	0.6011	0.6008
25	0.9976	0.9851	0.9712	0.9682	0.9679	0.9678

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF249 MATNO = 7193
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.34885E+01	0.9998	0.9998	0.9996	0.9984	0.9968	0.9963
2	0.40161E+01	1.0006	1.0006	1.0006	1.0005	1.0005	1.0005
3	0.36625E+01	1.0007	1.0007	1.0006	1.0003	1.0000	0.9999
4	0.35018E+01	1.0001	1.0001	1.0001	0.9998	0.9994	0.9993
5	0.44746E+01	1.0006	1.0005	1.0003	0.9986	0.9977	0.9967
6	0.60990E+01	1.0000	1.0000	0.9998	0.9988	0.9977	0.9976
7	0.72986E+01	0.9999	0.9999	0.9998	0.9998	0.9996	0.9996
8	0.87558E+01	1.0000	0.9999	0.9996	0.9980	0.9970	0.9967
9	0.98972E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
10	0.10274E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.10449E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.13281E+02	1.0000	0.9998	0.9990	0.9954	0.9932	0.9926
13	0.14549E+02	1.0002	1.0000	1.0000	0.9998	0.9994	0.9994
14	0.15200E+02	1.0010	1.0001	1.0000	0.9995	0.9993	0.9992
15	0.15822E+02	0.9998	1.0002	1.0001	0.9998	0.9997	0.9997
16	0.16570E+02	1.0000	1.0002	0.9998	0.9993	0.9991	0.9991
17	0.17262E+02	1.0000	1.0002	1.0000	1.0000	1.0001	1.0001
18	0.25364E+02	0.9987	0.9928	0.9794	0.9734	0.9721	0.9719
19	0.26215E+02	0.9959	0.9750	0.9346	0.9138	0.9099	0.9095
20	0.22209E+02	0.9836	0.9259	0.8783	0.8676	0.8662	0.8660
21	0.19169E+02	0.9987	0.9934	0.9897	0.9933	0.9947	0.9948
22	0.17897E+02	0.9999	1.0004	1.0017	1.0027	1.0028	1.0029
23	0.22505E+02	0.9978	0.9847	0.9567	0.9442	0.9425	0.9423
24	0.21749E+02	1.0030	1.0147	1.0279	1.0309	1.0312	1.0312
25	0.15723E+02	0.9996	0.9968	0.9936	0.9929	0.9928	0.9928

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF249 MATNO = 7193
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.37857E-02	1.0000	0.9999	0.9994	0.9964	0.9921	0.9908
2	0.94040E-02	1.0000	0.9999	0.9999	0.9995	0.9991	0.9989
3	0.23278E-01	1.0000	1.0000	1.0002	1.0015	1.0031	1.0036
4	0.58121E-01	1.0001	1.0001	0.9999	0.9986	0.9968	0.9965
5	0.11854E+00	1.0000	1.0000	0.9996	0.9979	0.9957	0.9948
6	0.12115E+00	1.0000	1.0000	1.0001	1.0007	1.0014	1.0015
7	0.12574E+00	1.0002	1.0002	1.0001	0.9996	0.9992	0.9991
8	0.16912E+00	1.0000	0.9999	0.9994	0.9969	0.9946	0.9941
9	0.27970E+00	1.0000	1.0000	0.9996	0.9979	0.9965	0.9963
10	0.45292E+00	1.0001	1.0001	0.9999	0.9992	0.9988	0.9987
11	0.61795E+00	0.9998	0.9998	0.9996	0.9989	0.9982	0.9981
12	0.81787E+00	1.0000	0.9999	0.9991	0.9962	0.9945	0.9941
13	0.13155E+01	1.0001	0.9996	0.9974	0.9915	0.9884	0.9879
14	0.23683E+01	1.0002	0.9992	0.9925	0.9768	0.9706	0.9697
15	0.66724E+01	0.9993	0.9939	0.9601	0.8994	0.8792	0.8744
16	0.12279E+02	0.9977	0.9800	0.8912	0.7792	0.7489	0.7468
17	0.15509E+02	0.9960	0.9655	0.8326	0.6983	0.6657	0.6614
18	0.17504E+02	0.9883	0.9106	0.6912	0.5422	0.5115	0.5076
19	0.30649E+02	0.9735	0.8208	0.5042	0.3408	0.3119	0.3084
20	0.38890E+02	0.9257	0.6259	0.2936	0.1921	0.1768	0.1750
21	0.30708E+02	0.9496	0.7159	0.4145	0.2988	0.2785	0.2760
22	0.43333E+02	1.0003	1.0021	1.0075	1.0107	1.0112	1.0113
23	0.63437E+02	0.9982	0.9873	0.9616	0.9489	0.9471	0.9469
24	0.92848E+02	1.0016	1.0043	1.0019	1.0011	1.0010	1.0010
25	0.13630E+03	1.0007	1.0047	1.0100	1.0111	1.0113	1.0113

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF249 MATNO = 7193

REACTION = FISSION

TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.21574E+01	0.9998	0.9998	0.9999	1.0002	1.0004	1.0004
2	0.18043E+01	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3	0.18937E+01	1.0003	1.0003	1.0003	1.0003	1.0002	1.0001
4	0.17584E+01	0.9999	0.9999	1.0000	1.0003	1.0007	1.0008
5	0.14206E+01	1.0000	1.0000	0.9999	1.0006	1.0013	1.0015
6	0.15108E+01	0.9998	0.9997	0.9997	0.9992	0.9990	0.9990
7	0.18317E+01	1.0000	1.0000	0.9999	0.9997	0.9993	0.9993
8	0.21938E+01	0.9999	0.9999	0.9997	0.9989	0.9982	0.9980
9	0.24305E+01	0.9998	0.9998	0.9998	0.9997	0.9997	0.9997
10	0.27326E+01	1.0000	1.0000	0.9998	0.9992	0.9988	0.9987
11	0.33704E+01	1.0000	1.0000	0.9999	0.9994	0.9991	0.9990
12	0.42397E+01	1.0001	1.0000	0.9988	0.9945	0.9920	0.9915
13	0.66324E+01	0.9999	0.9997	0.9982	0.9928	0.9900	0.9896
14	0.93968E+01	0.9997	0.9973	0.9799	0.9410	0.9259	0.9237
15	0.13345E+02	0.9993	0.9939	0.9601	0.8994	0.8792	0.8764
16	0.24559E+02	0.9977	0.9600	0.8912	0.7792	0.7489	0.7448
17	0.31019E+02	0.9960	0.9655	0.8326	0.6983	0.6657	0.6614
18	0.42694E+02	0.9888	0.9136	0.6894	0.5300	0.4974	0.4932
19	0.66618E+02	0.9796	0.8582	0.5736	0.4039	0.3722	0.3683
20	0.62359E+02	0.9341	0.6993	0.4601	0.3596	0.3396	0.3371
21	0.80803E+02	0.9758	0.8561	0.6393	0.4989	0.4701	0.4665
22	0.40491E+02	0.9929	0.9413	0.7770	0.6824	0.6676	0.6659
23	0.15405E+03	0.9820	0.8698	0.6414	0.5526	0.5403	0.5389
24	0.24388E+04	0.9562	0.8406	0.7717	0.7603	0.7591	0.7590
25	0.50584E+03	0.9981	0.9885	0.9769	0.9743	0.9740	0.9740

NUCLID = CF249 MAT NUMBER = 7193

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J = 1	2		
1	3.46756E+00	2.09711E-02		
2	3.99419E+00	2.19480E-02		
3	3.64059E+00	2.18761E-02		
4	3.48353E+00	1.82668E-02		
5	4.43453E+00	4.01120E-02		
6	6.04310E+00	5.59410E-02		
7	7.22555E+00	7.30921E-02		
8	8.65454E+00	1.01227E-01		
9	9.79372E+00	1.03508E-01		
10	1.01665E+01	1.07585E-01		
11	1.03381E+01	1.10791E-01		
12	1.31315E+01	1.49441E-01		
13	1.43925E+01	1.56016E-01		
14	1.50368E+01	1.63456E-01		
15	1.56513E+01	1.70690E-01		
16	1.63923E+01	1.77468E-01		
17	1.70758E+01	1.86094E-01		
18	2.51236E+01	2.40532E-01		
19	2.57406E+01	4.74436E-01		
20	2.20039E+01	2.05571E-01		
21	1.89893E+01	1.80161E-01		
22	1.76957E+01	2.01716E-01		
23	2.21996E+01	3.05785E-01		
24	2.15622E+01	1.87079E-01		
25	1.57233E+01	0.0		

NUCLID = CF249 MAT NUMBER = 7193
 TABLE OF INELASTIC MATRIXES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10	
1	J=	1	2	3	4						
1	1	3.28580E-04	4.91712E-03	2.09305E-02	1.28981E-01	2.18176E-01	3.32314E-01	5.143640E-01	4.40020E-01	2.27247E-01	7.02364E-02
	11	1.25064E-02									
2	0,0	5.16831E-02	2.83765E-01	4.21315E-01	4.22257E-01	1.96134E-01	6.45884E-02	2.15106E-02	4.76918E-02	7.53482E-02	
	0,0										
3	0,0	3.59275E-02	2.57352E-01	4.38759E-01	4.56619E-01	2.23837E-01	7.74343E-02	2.40265E-02	6.01317E-03	9.78907E-04	0,0
	0,0										
4	0,0	1.71797E-01	4.55439E-01	6.20227E-01	3.59641E-01	1.36227E-01	4.66479E-02	1.21424E-02	1.97043E-03	0,0	0,0
	0,0										
5	0,0	2.56007E-01	7.11967E-01	5.27721E-01	2.37126E-01	8.70964E-02	2.29525E-02	3.78517E-03	0,0	0,0	0,0
	0,0										
6	0,0	3.30378E-01	5.84364E-01	3.80650E-01	1.61637E-01	4.56315E-02	7.79088E-03	0,0	0,0	0,0	0,0
	0,0										
7	0,0	7.24459E-02	1.84297E-01	9.83149E-02	4.30122E-02	2.66663E-02	0,0	0,0	0,0	0,0	0,0
	0,0										
8	0,0	3.20358E-03	2.14352E-03	2.15926E-02	3.70803E-02	0,0	0,0	0,0	0,0	0,0	0,0
	0,0										
9	0,0	8.88720E-05	5.78030E-03	1.01696E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	0,0										
10	0,0	0,0	0,0	0,0	7.38653E-06	1.30606E-05	0,0	0,0	0,0	0,0	0,0
	0,0										

NUCLID = CF250 MAT_NO = 7194
 INFINITE DILUTION CROSS SECTION

GROUP TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.77924E+00	2.21892E+00	3.33687E+00	3.78574E-03	3.48853E+00	4.99571E-01	5.68435E-01	8.71288E-01
2	7.36687E+00	1.95248E+00	4.71133E+00	9.40397E-03	4.01614E+00	1.38885E+00	0.0	8.23841E-01
3	7.16923E+00	2.07388E+00	4.32246E+00	2.32776E-02	3.66247E+00	1.40961E+00	0.0	7.31781E-01
4	7.27553E+00	2.09808E+00	4.05250E+00	5.81206E-02	3.50179E+00	1.61754E+00	0.0	6.49810E-01
5	8.31695E+00	2.03971E+00	3.87486E+00	1.16544E-01	4.47464E+00	1.68406E+00	0.0	5.80494E-01
6	9.60589E+00	1.88927E+00	3.76340E+00	1.21153E-01	6.09904E+00	1.49643E+00	0.0	3.48330E-01
7	9.91987E+00	1.63343E+00	3.69942E+00	1.25738E-01	7.29864E+00	8.62056E-01	0.0	2.34867E-01
8	1.01797E+01	1.11042E+00	3.66890E+00	1.69117E-01	8.75577E+00	1.44350E-01	0.0	1.40779E-01
9	1.06991E+01	4.98513E-01	3.65124E+00	2.79704E-01	9.89722E+00	2.36762E-02	0.0	5.98376E-02
10	1.08704E+01	1.43419E-01	3.64320E+00	4.52915E-01	1.02741E+01	3.01839E-05	0.0	2.19337E-02
11	1.11669E+01	1.00000E-01	3.63722E+00	6.17950E-01	1.04489E+01	0.0	0.0	6.33043E-03
12	1.41988E+01	1.00000E-01	3.63545E+00	6.17873E-01	1.32809E+01	0.0	0.0	2.68969E-03
13	1.59640E+01	1.00000E-01	3.63462E+00	1.31548E+00	1.45485E+01	0.0	0.0	2.68969E-03
14	1.74100E+01	1.00000E-01	3.63423E+00	2.10975E+00	1.52003E+01	0.0	0.0	2.68969E-03
15	2.38240E+01	1.00000E-01	3.63405E+00	7.90203E+00	1.58220E+01	0.0	0.0	2.68969E-03
16	3.46878E+01	1.00000E-01	3.63397E+00	1.80181E+01	1.65697E+01	0.0	0.0	2.68969E-03
17	4.81957E+01	1.00000E-01	3.63393E+00	2.65039E+01	2.15918E+01	0.0	0.0	2.68969E-03
18	9.20886E+01	1.00000E-01	3.63392E+00	5.24006E+01	3.95878E+01	0.0	0.0	2.68969E-03
19	1.68824E+02	1.00000E-01	3.63391E+00	1.26682E+02	4.00415E+01	0.0	0.0	2.68969E-03
20	2.59762E+02	1.00000E-01	3.63390E+00	2.15674E+02	4.39879E+01	0.0	0.0	2.68969E-03
21	2.02265E+02	1.00000E-01	3.63390E+00	1.81477E+02	2.06688E+01	0.0	0.0	2.68969E-03
22	2.54612E+02	1.00000E-01	3.63390E+00	2.30741E+02	2.37716E+01	0.0	0.0	2.68969E-03
23	8.82223E+02	1.00000E-01	3.63390E+00	8.16743E+02	6.53804E+01	0.0	0.0	2.68969E-03
24	1.84936E+04	1.00000E-01	3.63390E+00	1.74740E+04	1.01949E+03	0.0	0.0	2.68969E-03
25	1.82471E+02	1.00000E-01	3.63390E+00	1.66910E+02	1.54608E+01	0.0	0.0	5.27112E-03

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF250 MATNO = 7194
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =							
	10000.	1000.	100.	10.	1.	0.	0.	0.
1	1.0000	1.0000	0.9999	0.9991	0.9977	0.9972		
2	0.9996	0.9996	0.9996	0.9996	0.9995	0.9995		
3	0.9997	0.9997	0.9996	0.9996	0.9995	0.9995		
4	0.9999	0.9998	0.9998	0.9993	0.9986	0.9985		
5	1.0000	1.0000	0.9997	0.9983	0.9964	0.9959		
6	1.0000	1.0000	0.9999	0.9992	0.9985	0.9983		
7	0.9999	0.9998	0.9998	0.9998	0.9997	0.9997		
8	1.0000	1.0000	0.9999	0.9994	0.9989	0.9988		
9	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998		
10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
11	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999		
12	1.0000	0.9998	0.9986	0.9930	0.9864	0.9875		
13	1.0000	1.0000	0.9998	0.9991	0.9986	0.9985		
14	1.0000	1.0000	0.9997	0.9988	0.9982	0.9981		
15	0.9997	0.9987	0.9899	0.9650	0.9534	0.9516		
16	1.0000	0.9998	0.9981	0.9942	0.9927	0.9924		
17	0.9996	0.9976	0.9839	0.9594	0.9525	0.9516		
18	0.9556	0.8504	0.8088	0.7981	0.7962	0.7959		
19	0.8443	0.6154	0.5452	0.5273	0.5245	0.5241		
20	0.7157	0.5193	0.4782	0.4682	0.4668	0.4666		
21	0.9995	0.9955	0.9819	0.9739	0.9727	0.9726		
22	0.9999	0.9993	0.9976	0.9968	0.9967	0.9967		
23	0.9685	0.8741	0.8006	0.7859	0.7843	0.7841		
24	0.2644	0.1477	0.1004	0.0927	0.0919	0.0918		
25	0.9990	0.9912	0.9521	0.9290	0.9255	0.9251		

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TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF250 MATNO = 7194
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.34885E+01	0.9998	0.9998	0.9996	0.9987	0.9971	0.9968
2	0.40161E+01	1.0006	1.0006	1.0006	1.0005	1.0005	1.0005
3	0.36625E+01	1.0007	1.0007	1.0006	1.0005	1.0002	1.0002
4	0.35018E+01	1.0001	1.0001	1.0000	0.9996	0.9991	0.9989
5	0.44746E+01	1.0006	1.0005	1.0003	0.9985	0.9965	0.9960
6	0.60990E+01	1.0000	1.0000	0.9998	0.9989	0.9978	0.9976
7	0.72986E+01	0.9999	0.9999	0.9999	1.0003	1.0003	1.0003
8	0.87558E+01	1.0001	1.0001	0.9999	0.9992	0.9986	0.9984
9	0.98972E+01	1.0000	1.0000	1.0000	0.9999	0.9996	0.9997
10	0.10274E+02	1.0000	1.0000	1.0000	0.9999	1.0000	1.0000
11	0.10449E+02	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
12	0.13281E+02	1.0000	0.9999	0.9992	0.9957	0.9930	0.9925
13	0.14549E+02	1.0000	1.0000	1.0000	1.0003	0.9998	0.9998
14	0.15200E+02	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
15	0.15822E+02	1.0000	1.0000	0.9992	0.9986	0.9981	0.9980
16	0.16570E+02	1.0000	0.9999	0.9996	0.9992	0.9991	0.9990
17	0.21592E+02	0.9999	0.9983	0.9868	0.9673	0.9617	0.9610
18	0.39588E+02	0.9824	0.9286	0.8862	0.8701	0.8671	0.8667
19	0.40041E+02	0.9099	0.7121	0.6047	0.5836	0.5810	0.5807
20	0.43988E+02	0.8291	0.5125	0.5330	0.5187	0.5171	0.5169
21	0.20689E+02	0.9999	0.9994	0.9976	0.9964	0.9963	0.9963
22	0.23772E+02	0.9999	0.9995	0.9983	0.9977	0.9976	0.9976
23	0.65380E+02	0.9281	0.7524	0.6536	0.6362	0.6343	0.6340
24	0.10195E+04	0.6726	0.5942	0.5523	0.5443	0.5404	0.5431
25	0.15461E+02	0.9979	0.9835	0.9482	0.9330	0.9311	0.9309

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF250 MATNO = 7194
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.37857E+02	0.9999	0.9999	0.9995	0.9969	0.9933	0.9923
2	0.94040E+02	1.0000	1.0000	0.9999	0.9995	0.9990	0.9988
3	0.23278E+01	1.0000	1.0000	1.0002	1.0012	1.0025	1.0028
4	0.58121E+01	1.0001	1.0001	0.9996	0.9973	0.9940	0.9933
5	0.11854E+00	1.0000	1.0000	0.9996	0.9975	0.9950	0.9941
6	0.12115E+00	1.0000	1.0000	1.0001	1.0007	1.0013	1.0014
7	0.12574E+00	1.0002	1.0002	1.0002	1.0003	1.0005	1.0006
8	0.16912E+00	0.9998	0.9998	0.9995	0.9986	0.9975	0.9973
9	0.27970E+00	1.0000	1.0000	0.9999	0.9996	0.9993	0.9993
10	0.45292E+00	1.0001	1.0001	1.0001	0.9999	0.9997	0.9997
11	0.61795E+00	1.0000	1.0000	0.9999	0.9996	0.9993	0.9992
12	0.81787E+00	1.0000	0.9999	0.9994	0.9973	0.9949	0.9949
13	0.13155E+01	0.9997	0.9997	0.9988	0.9961	0.9945	0.9941
14	0.21097E+01	1.0001	1.0000	0.9990	0.9959	0.9938	0.9934
15	0.79020E+01	0.9998	0.9983	0.9855	0.9484	0.9306	0.9278
16	0.18018E+02	1.0000	0.9998	0.9981	0.9949	0.9934	0.9933
17	0.26504E+02	0.9999	0.9992	0.9944	0.9855	0.9830	0.9827
18	0.52401E+02	0.9642	0.8562	0.7828	0.7692	0.7678	0.7677
19	0.12868E+03	0.9022	0.6918	0.5790	0.5526	0.5488	0.5484
20	0.21567E+03	0.8171	0.5882	0.5057	0.4892	0.4871	0.4869
21	0.18148E+03	0.9998	0.9981	0.9923	0.9887	0.9881	0.9880
22	0.23074E+03	0.9999	0.9996	0.9988	0.9983	0.9982	0.9982
23	0.81674E+03	0.8990	0.6333	0.5173	0.4939	0.4913	0.4911
24	0.17474E+05	0.4388	0.2745	0.2016	0.1879	0.1864	0.1863
25	0.16691E+03	0.9993	0.9939	0.9748	0.9629	0.9609	0.9607

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF250 MATNO = 7194
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA C =					
		10000.	1000.	100.	10.	1.	0.
1	0.22189E+01	1.0001	1.0001	1.0002	1.0006	1.0011	1.0012
2	0.19525E+01	1.0000	1.0000	1.0000	1.0000	1.0001	1.0001
3	0.20739E+01	1.0005	1.0005	1.0005	1.0005	1.0006	1.0006
4	0.20981E+01	1.0001	1.0001	1.0000	0.9995	1.0002	1.0000
5	0.20397E+01	1.0001	1.0001	1.0001	1.0004	1.0006	1.0007
6	0.18893E+01	1.0002	1.0002	1.0003	1.0006	1.0008	1.0009
7	0.16334E+01	1.0003	1.0003	1.0003	1.0000	0.9997	0.9997
8	0.11104E+01	0.9999	0.9999	1.0003	1.0023	1.0042	1.0046
9	0.49851E+00	1.0000	1.0000	0.9999	1.0004	1.0008	1.0009
10	0.14342E+00	0.9998	0.9999	1.0000	1.0006	1.0012	1.0014
11	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0.10000E+00	1.0000	1.0000	1.0000	1.0001	1.0000	1.0000
14	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.10000E+00	1.0000	1.0000	0.9993	0.9997	0.9997	0.9996
16	0.10000E+00	1.0000	1.0000	0.9998	0.9997	0.9999	0.9999
17	0.10000E+00	1.0000	0.9999	1.0000	0.9999	0.9998	0.9998
18	0.10000E+00	1.0000	1.0000	1.0001	1.0001	1.0000	1.0000
19	0.10000E+00	0.9999	1.0001	1.0000	1.0000	1.0000	1.0000
20	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.10000E+00	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000
22	0.10000E+00	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000
23	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.10000E+00	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25	0.10000E+00	0.9999	0.9994	0.9997	0.9996	0.9998	0.9998

NUCLID = CF250 MAT NUMBER = 7194

TABLE OF ELASTIC MATRICES

GROUP	EXIT	J=	GROUP	** KK **		KK = I + J - 1
				**	**	
1		1	2			
1	3.46778E+00	2.07530E-02				
2	3.99416E+00	2.19847E-02				
3	3.64070E+00	2.17709E-02				
4	3.48364E+00	1.81479E-02				
5	4.43467E+00	3.99655E-02				
6	5.04331E+00	5.57347E-02				
7	7.22582E+00	7.28224E-02				
8	8.65491E+00	1.00653E-01				
9	9.79410E+00	1.03124E-01				
10	1.01669E+01	1.07186E-01				
11	1.03386E+01	1.10379E-01				
12	1.31320E+01	1.48886E-01				
13	1.43931E+01	1.55440E-01				
14	1.50374E+01	1.62852E-01				
15	1.56520E+01	1.70059E-01				
16	1.63929E+01	1.76812E-01				
17	2.12434E+01	3.48372E-01				
18	3.93326E+01	2.55207E-01				
19	3.98194E+01	2.22083E-01				
20	4.37452E+01	2.02692E-01				
21	2.04594E+01	2.29341E-01				
22	2.34949E+01	2.76684E-01				
23	6.30159E+01	2.36450E+00				
24	1.01700E+03	2.49226E+00				
25	1.54608E+01	0.0				

NUCLID = CF250 MAT NUMBER = 7194

TABLE OF INEL+(N,2N) MATRICES

GROUP	EXIT	GROUP	**	KK	**	KK	=	1	+	J	-	1	6	7	8	9	10
1	J=	1	2	3	4	5	6	7	8	9	10	11	6	7	8	9	10
1	3.47543E-04	8.05176E-03	3.74907E-02	1.72050E-01	2.53195E-01	3.07522E-01	3.51401E-01	2.80273E-01	1.59913E-01	5.58189E-02							
	1.03802E-02																
2	0.0	5.48970E-02	2.94690E-01	4.33804E-01	3.70407E-01	1.62634E-01	5.21860E-02	1.59181E-02	3.72006E-03	5.91742E-04							
	0.0																
3	3.51888E-02	2.51438E-01	4.22193E-01	4.09697E-01	1.96639E-01	6.72572E-02	2.11055E-02	5.23945E-03	8.51887E-04	0.0							
	0.0																
4	1.57366E-01	4.07291E-01	5.35225E-01	3.30789E-01	1.30394E-01	4.37319E-02	1.09689E-02	1.77731E-03	0.0	0.0							
	0.0																
5	2.27708E-01	6.41436E-01	4.95001E-01	2.18105E-01	7.80069E-02	2.04380E-02	3.36304E-03	0.0	0.0	0.0							
	0.0																
6	4.32620E-01	5.46759E-01	3.26821E-01	1.42448E-01	4.07901E-02	6.98674E-03	0.0	0.0	0.0	0.0							
	0.0																
7	1.24503E-01	3.63982E-01	1.95846E-01	9.98601E-02	7.78649E-02	0.0	0.0	0.0	0.0	0.0							
	0.0																
8	8.67596E-03	5.42083E-03	4.80579E-02	8.21949E-02	0.0	0.0	0.0	0.0	0.0	0.0							
	0.0																
9	1.31192E-04	8.53282E-03	1.50122E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
	0.0																
10	0.0	0.0	0.0	1.03039E-05	1.92799E-05	0.0	0.0	0.0	0.0	0.0							
	0.0																

NUCLID = CF251 MAT NO = 7195
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	6.77487E+00	2.15743E+00	5.60021E+00	3.78574E-03	3.46853E+00	1.09916E-01	1.01520E+00	8.71073E-01	2.06988E-02
2	7.37046E+00	1.80428E+00	4.97842E+00	9.40397E-03	4.01614E+00	1.34031E+00	2.00319E-01	8.23523E-01	2.19436E-02
3	7.10034E+00	1.89366E+00	4.58438E+00	2.32776E-02	3.66247E+00	1.52094E+00	0.0	7.31260E-01	2.17246E-02
4	7.12241E+00	1.75840E+00	4.30980E+00	5.81206E-02	3.50179E+00	1.80409E+00	0.0	6.49286E-01	1.80917E-02
5	7.86041E+00	1.42057E+00	4.12242E+00	1.18544E-01	4.47464E+00	1.84666E+00	0.0	5.80337E-01	3.98093E-02
6	9.24146E+00	1.51081E+00	4.00327E+00	1.21153E-01	6.09904E+00	1.51045E+00	0.0	3.48322E-01	5.55139E-02
7	9.71204E+00	1.83171E+00	3.93842E+00	1.25738E-01	7.29864E+00	4.55952E-01	0.0	2.34857E-01	7.25337E-02
8	1.12259E+01	2.19383E+00	3.90645E+00	1.69117E-01	8.75577E+00	1.07229E-01	0.0	1.40769E-01	1.00454E-01
9	1.26433E+01	2.43046E+00	3.89038E+00	2.79704E-01	9.89722E+00	3.58844E-02	0.0	5.98269E-02	1.02715E-01
10	1.34658E+01	2.73260E+00	3.88290E+00	4.52915E-01	1.02741E+01	6.20515E-03	0.0	2.19230E-02	1.06761E-01
11	1.44373E+01	3.37041E+00	3.87911E+00	6.17950E-01	1.04489E+01	0.0	0.0	6.31967E-03	1.09942E-01
12	1.83385E+01	4.23969E+00	3.87732E+00	8.17873E-01	1.32809E+01	0.0	0.0	2.67899E-03	1.48297E-01
13	2.26122E+01	6.74816E+00	3.87650E+00	1.31548E+00	1.45485E+01	0.0	0.0	2.67899E-03	1.54819E-01
14	3.09673E+01	1.36573E+01	3.87613E+00	2.10975E+00	1.52003E+01	0.0	0.0	2.67899E-03	1.62203E-01
15	4.54580E+01	2.17340E+01	3.87595E+00	7.90203E+00	1.56220E+01	0.0	0.0	2.67899E-03	1.69381E-01
16	6.64629E+01	3.18751E+01	3.87587E+00	1.80181E+01	1.65697E+01	0.0	0.0	2.67899E-03	1.76107E-01
17	9.13853E+01	4.67880E+01	3.87583E+00	2.65039E+01	1.80934E+01	0.0	0.0	2.67899E-03	2.15778E-01
18	1.32711E+02	6.86431E+01	3.87582E+00	4.12742E+01	2.27935E+01	0.0	0.0	2.67899E-03	2.55864E-01
19	2.51839E+02	1.35857E+02	3.87581E+00	8.76479E+01	2.83337E+01	0.0	0.0	2.67899E-03	2.17183E-01
20	3.56222E+02	2.00741E+02	3.87580E+00	1.30031E+02	2.54498E+01	0.0	0.0	2.67899E-03	2.65774E-01
21	5.93344E+02	3.19285E+02	3.87580E+00	2.46761E+02	2.72974E+01	0.0	0.0	2.67899E-03	2.13459E-01
22	7.10406E+02	3.20428E+02	3.87580E+00	3.68198E+02	2.17814E+01	0.0	0.0	2.67899E-03	2.41984E-01
23	9.37460E+02	4.70442E+02	3.87580E+00	4.37397E+02	2.96213E+01	0.0	0.0	2.67899E-03	5.17319E-01
24	2.67235E+03	6.89759E+02	3.87580E+00	1.83379E+03	1.48799E+02	0.0	0.0	2.67899E-03	1.25682E+00
25	1.88804E+03	1.01353E+03	3.87580E+00	8.12902E+02	6.16080E+01	0.0	0.0	3.70045E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF251 MATNO = 7195
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9998	0.9987	0.9968	0.9962
2	0.9996	0.9996	0.9996	0.9995	0.9995	0.9995
3	0.9997	0.9997	0.9997	0.9996	0.9994	0.9994
4	0.9999	0.9999	0.9999	0.9998	0.9996	0.9996
5	1.0000	1.0000	0.9998	0.9986	0.9968	0.9963
6	1.0000	0.9999	0.9998	0.9990	0.9981	0.9979
7	1.0000	1.0000	0.9999	0.9997	0.9995	0.9994
8	1.0000	0.9999	0.9995	0.9972	0.9948	0.9944
9	1.0000	1.0000	0.9999	0.9996	0.9994	0.9993
10	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
11	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
12	1.0000	0.9998	0.9980	0.9914	0.9872	0.9864
13	1.0000	0.9998	0.9981	0.9929	0.9904	0.9900
14	1.0000	0.9996	0.9966	0.9889	0.9856	0.9852
15	0.9998	0.9983	0.9884	0.9704	0.9649	0.9642
16	0.9999	0.9992	0.9943	0.9873	0.9856	0.9854
17	0.9998	0.9985	0.9912	0.9829	0.9812	0.9810
18	0.9997	0.9969	0.9851	0.9754	0.9737	0.9735
19	0.9661	0.8739	0.8259	0.8158	0.8145	0.8143
20	0.9648	0.8941	0.8607	0.8526	0.8516	0.8515
21	0.9254	0.8199	0.7793	0.7710	0.7700	0.7699
22	0.9990	0.9938	0.9865	0.9847	0.9845	0.9845
23	0.9991	0.9950	0.9903	0.9894	0.9892	0.9892
24	0.8627	0.6734	0.6213	0.6150	0.6143	0.6143
25	0.9976	0.9896	0.9847	0.9840	0.9839	0.9839

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF251 MATNO = 7195
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.34885E+01	0.9998	0.9998	0.9996	0.9984	0.9967	0.9962
2	0.40161E+01	1.0006	1.0006	1.0006	1.0005	1.0004	1.0005
3	0.36625E+01	1.0007	1.0007	1.0006	1.0003	1.0000	0.9999
4	0.35018E+01	1.0001	1.0001	1.0001	0.9998	0.9994	0.9993
5	0.44746E+01	1.0006	1.0005	1.0003	0.9986	0.9967	0.9967
6	0.60990E+01	1.0000	1.0000	0.9998	0.9988	0.9977	0.9976
7	0.72986E+01	0.9999	0.9998	0.9998	0.9997	0.9996	0.9995
8	0.87558E+01	1.0001	1.0001	0.9998	0.9981	0.9970	0.9968
9	0.98972E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
10	0.10274E+02	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
11	0.10449E+02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.13281E+02	1.0000	0.9998	0.9990	0.9954	0.9932	0.9926
13	0.14549E+02	1.0000	1.0000	1.0000	0.9997	0.9993	0.9993
14	0.15200E+02	1.0000	0.9999	0.9996	0.9993	0.9991	0.9991
15	0.15822E+02	1.0000	0.9999	0.9992	0.9986	0.9985	0.9985
16	0.16570E+02	1.0000	0.9999	0.9992	0.9988	0.9987	0.9987
17	0.18093E+02	1.0000	0.9996	0.9971	0.9948	0.9942	0.9941
18	0.22794E+02	0.9996	0.9991	0.9967	0.9948	0.9945	0.9944
19	0.28334E+02	0.9863	0.9383	0.9014	0.8946	0.8940	0.8939
20	0.25450E+02	0.9823	0.9338	0.9059	0.9016	0.9012	0.9011
21	0.27297E+02	0.9554	0.8655	0.8286	0.8241	0.8236	0.8235
22	0.21781E+02	0.9994	0.9980	0.9964	0.9961	0.9961	0.9961
23	0.29621E+02	0.9986	0.9927	0.9868	0.9858	0.9857	0.9857
24	0.14880E+03	0.9510	0.8620	0.8260	0.8210	0.8204	0.8204
25	0.61608E+02	1.0068	1.0282	1.0412	1.0431	1.0434	1.0434

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF251 MATNO = 7195
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.37857E-02	1.0000	0.9999	0.9994	0.9964	0.9920	0.9908
2	0.94040E-02	0.9999	0.9999	0.9998	0.9994	0.9988	0.9986
3	0.23278E-01	1.0000	1.0000	1.0002	1.0015	1.0031	1.0036
4	0.58121E-01	1.0001	1.0001	0.9999	0.9986	0.9968	0.9965
5	0.11854E+00	1.0000	1.0000	0.9996	0.9979	0.9957	0.9948
6	0.12115E+00	1.0000	1.0000	1.0001	1.0007	1.0014	1.0015
7	0.12574E+00	1.0002	1.0002	1.0000	0.9996	0.9990	0.9989
8	0.16912E+00	0.9998	0.9997	0.9992	0.9970	0.9948	0.9944
9	0.27970E+00	1.0000	1.0000	0.9996	0.9979	0.9966	0.9963
10	0.45292E+00	1.0001	1.0001	0.9999	0.9992	0.9988	0.9987
11	0.61795E+00	0.9998	0.9998	0.9996	0.9989	0.9982	0.9981
12	0.81787E+00	1.0000	0.9999	0.9991	0.9962	0.9945	0.9941
13	0.13155E+01	0.9999	0.9996	0.9972	0.9907	0.9873	0.9868
14	0.21097E+01	1.0000	0.9995	0.9960	0.9869	0.9835	0.9829
15	0.79020E+01	0.9997	0.9973	0.9802	0.9489	0.9392	0.9379
16	0.18018E+02	0.9996	0.9991	0.9968	0.9921	0.9909	0.9908
17	0.26504E+02	0.9999	0.9990	0.9948	0.9903	0.9894	0.9893
18	0.41274E+02	0.9997	0.9973	0.9873	0.9798	0.9786	0.9784
19	0.87648E+02	0.9898	0.9544	0.9238	0.9159	0.9149	0.9148
20	0.13003E+03	0.9899	0.9619	0.9416	0.9367	0.9361	0.9361
21	0.24676E+03	0.9810	0.9392	0.9106	0.9039	0.9031	0.9030
22	0.36820E+03	0.9996	0.9970	0.9942	0.9934	0.9933	0.9933
23	0.43740E+03	0.9997	0.9990	0.9980	0.9979	0.9978	0.9978
24	0.18338E+04	0.8884	0.6988	0.6315	0.6227	0.6218	0.6217
25	0.81290E+03	0.9986	0.9935	0.9904	0.9900	0.9899	0.9899

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF251 MATNO = 7195
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.21574E+01	0.9998	0.9998	0.9999	1.0002	1.0004	1.0005
2	0.18043E+01	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3	0.18937E+01	1.0003	1.0003	1.0003	1.0003	1.0002	1.0001
4	0.17584E+01	0.9999	0.9999	1.0000	1.0003	1.0007	1.0008
5	0.14206E+01	1.0000	1.0000	0.9999	1.0006	1.0013	1.0015
6	0.15108E+01	0.9998	0.9997	0.9997	0.9992	0.9990	0.9990
7	0.18317E+01	1.0000	1.0000	1.0000	0.9996	0.9992	0.9991
8	0.21938E+01	1.0000	0.9999	0.9997	0.9997	0.9989	0.9980
9	0.24305E+01	0.9998	0.9998	0.9998	0.9997	0.9997	0.9997
10	0.27326E+01	1.0000	1.0000	0.9998	0.9993	0.9988	0.9987
11	0.33704E+01	1.0000	1.0000	0.9999	0.9994	0.9991	0.9990
12	0.42397E+01	1.0001	1.0000	0.9988	0.9945	0.9920	0.9915
13	0.67482E+01	0.9999	0.9997	0.9976	0.9908	0.9874	0.9868
14	0.13657E+02	1.0000	0.9996	0.9966	0.9890	0.9859	0.9855
15	0.21734E+02	0.9997	0.9991	0.9955	0.9879	0.9854	0.9851
16	0.31875E+02	0.9999	0.9999	0.9963	0.9918	0.9906	0.9905
17	0.46788E+02	1.0000	0.9991	0.9949	0.9901	0.9892	0.9891
18	0.68643E+02	0.9998	0.9986	0.9925	0.9881	0.9872	0.9871
19	0.13586E+03	0.9738	0.8825	0.8093	0.7936	0.7917	0.7915
20	0.20074E+03	0.9738	0.9013	0.8537	0.8439	0.8428	0.8426
21	0.31929E+03	0.9389	0.8137	0.7548	0.7453	0.7443	0.7441
22	0.32043E+03	0.9998	0.9962	0.9915	0.9903	0.9902	0.9902
23	0.47044E+03	0.9992	0.9959	0.9926	0.9919	0.9918	0.9918
24	0.68976E+03	0.9985	0.9938	0.9898	0.9891	0.9890	0.9890
25	0.10135E+04	0.9983	0.9936	0.9906	0.9901	0.9900	0.9900

NUCLID = CF251 MAT NUMBER = 7195

TABLE OF ELASTIC MATRICES

GROUP	EXIT	GROUP	** KK **	KK = I + J - 1
1	J=1	2		
1	3.46783E+00	2.06987E-02		
2	3.99420E+00	2.19436E-02		
3	3.64074E+00	2.17245E-02		
4	3.48370E+00	1.80917E-02		
5	4.43483E+00	3.98093E-02		
6	6.04353E+00	5.55139E-02		
7	7.22611E+00	7.25337E-02		
8	8.65531E+00	1.00454E-01		
9	9.79451E+00	1.02716E-01		
10	1.01673E+01	1.06762E-01		
11	1.03390E+01	1.09942E-01		
12	1.31326E+01	1.48297E-01		
13	1.43937E+01	1.54820E-01		
14	1.50381E+01	1.62202E-01		
15	1.56526E+01	1.69381E-01		
16	1.63936E+01	1.76107E-01		
17	1.78776E+01	2.15778E-01		
18	2.25377E+01	2.55864E-01		
19	2.81165E+01	2.17183E-01		
20	2.51841E+01	2.65774E-01		
21	2.70840E+01	2.13458E-01		
22	2.15394E+01	2.41985E-01		
23	2.91039E+01	5.17319E-01		
24	1.47542E+02	1.25682E+00		
25	6.16080E+01	0.0		

NUCLID = CF251 MAT NUMBER = 7195
 TABLE OF INEL+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J -	5	6	7	8	9	10
1	1	11	2	3	4						
1	2.01240E-04	2.92234E-03	1.57791E-02	2.48540E-01	5.93470E-01	7.07248E-01	3.73759E-01	1.40357E-01	4.44666E-02	1.16862E-02	
	1.88959E-03										
2	0.0	5.39147E-02	2.81946E-01	4.15593E-01	3.60081E-01	1.98164E-01	1.98327E-01	1.55379E-01	6.45594E-02	1.29837E-02	
	0.0										
3	3.81172E-02	2.69905E-01	4.56278E-01	4.42245E-01	2.12363E-01	7.26537E-02	2.28006E-02	5.65915E-03	9.20046E-04	0.0	
	0.0										
4	1.76204E-01	4.54542E-01	5.94154E-01	3.70102E-01	1.45900E-01	4.89291E-02	1.22723E-02	1.98848E-03	0.0	0.0	
	0.0										
5	2.55474E-01	6.96384E-01	5.43691E-01	2.39445E-01	8.55613E-02	2.24129E-02	3.68735E-03	0.0	0.0	0.0	
	0.0										
6	4.58193E-01	5.50026E-01	3.18046E-01	1.38071E-01	3.93834E-02	6.73208E-03	0.0	0.0	0.0	0.0	
	0.0										
7	7.64544E-02	1.91418E-01	1.03833E-01	4.92757E-02	3.49706E-02	0.0	0.0	0.0	0.0	0.0	
	0.0										
8	6.02588E-03	3.94102E-03	3.58661E-02	6.13965E-02	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0										
9	2.38758E-04	1.29320E-02	2.27136E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0										
10	2.18881E-03	3.86498E-03	0.0	5.46783E-05	9.66804E-05	0.0	0.0	0.0	0.0	0.0	
	0.0										

NUCLID = CF252 MAT NO = 7196
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	NZN	EL MU	EL REMOVAL
1	6.78106E+00	2.52751E+00	5.28536E+00	2.90475E-03	3.56081E+00	2.61088E-01	4.28741E-01	8.71027E-01	2.07985E-02
2	7.29450E+00	2.22948E+00	4.71969E+00	5.30578E-03	3.97581E+00	1.07802E+00	5.88567E-03	8.23020E-01	2.15665E-02
3	6.98937E+00	2.34755E+00	4.30649E+00	8.30219E-03	3.60850E+00	1.02502E+00	0.0	7.30726E-01	2.15735E-02
4	7.08363E+00	2.46537E+00	4.02037E+00	1.47403E-02	3.56387E+00	1.03965E+00	0.0	6.48655E-01	1.86902E-02
5	8.34753E+00	2.05613E+00	3.83767E+00	3.47010E-02	4.67553E+00	1.58118E+00	0.0	5.86043E-01	3.96153E-02
6	9.00825E+00	8.65397E-01	3.72595E+00	8.07998E-02	6.30990E+00	1.75215E+00	0.0	2.67577E-01	6.75256E-02
7	8.26179E+00	1.95569E-01	3.64969E+00	1.44575E-01	7.38953E+00	5.32111E-01	0.0	1.10030E-01	8.26279E-02
8	8.36500E+00	1.33953E-01	3.61478E+00	1.91058E-01	7.93094E+00	1.09051E-01	0.0	4.78455E-02	9.07875E-02
9	1.39885E+01	1.23878E-01	3.59577E+00	2.50158E-01	1.35944E+01	2.00303E-02	0.0	1.36478E-02	1.85695E-01
10	2.04546E+01	1.86031E-01	3.58584E+00	4.01594E-01	1.98669E+01	0.0	0.0	2.66827E-03	2.13919E-01
11	2.21622E+01	3.42118E-01	3.58196E+00	7.25677E-01	2.10944E+01	0.0	0.0	2.66827E-03	2.23899E-01
12	2.40668E+01	5.65357E-01	3.58017E+00	1.56210E+00	2.19394E+01	0.0	0.0	2.66827E-03	2.33068E-01
13	2.59981E+01	8.71176E-01	3.57932E+00	2.26305E+00	2.28638E+01	0.0	0.0	2.66827E-03	2.42087E-01
14	2.78791E+01	1.36051E+00	3.57893E+00	2.52375E+00	2.39948E+01	0.0	0.0	2.66827E-03	2.56819E-01
15	3.00990E+01	2.03030E+00	3.57876E+00	2.77449E+00	2.52942E+01	0.0	0.0	2.66827E-03	2.70657E-01
16	3.23208E+01	3.15022E+00	3.57867E+00	3.74937E+00	2.56212E+01	0.0	0.0	2.66827E-03	2.45303E-01
17	4.23389E+01	1.30046E+01	3.57863E+00	6.21085E+00	2.31234E+01	0.0	0.0	2.66827E-03	1.94259E-01
18	5.56975E+01	2.35935E+01	3.57862E+00	8.98622E+00	2.31177E+01	0.0	0.0	2.66827E-03	1.92994E-01
19	5.08585E+01	2.12584E+01	3.57861E+00	8.09689E+00	2.15032E+01	0.0	0.0	2.66827E-03	2.06897E-01
20	1.08814E+02	6.20447E+01	3.57860E+00	2.36312E+01	2.31380E+01	0.0	0.0	2.66827E-03	1.87970E-01
21	1.88870E+01	4.56582E-01	3.57860E+00	1.74126E-01	1.82563E+01	0.0	0.0	2.66827E-03	1.91861E-01
22	1.98733E+01	1.00170E+00	3.57860E+00	3.81982E-01	1.84897E+01	0.0	0.0	2.66827E-03	1.92058E-01
23	2.19765E+01	2.44400E+00	3.57860E+00	9.34717E-01	1.85977E+01	0.0	0.0	2.66827E-03	1.94293E-01
24	2.71079E+01	5.61672E+00	3.57860E+00	2.84345E+00	1.86477E+01	0.0	0.0	2.66827E-03	1.94578E-01
25	3.41678E+01	9.60678E+00	3.57860E+00	5.89007E+00	1.86710E+01	0.0	0.0	6.10100E-03	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF252 MATNO = 7196
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	SIGMA 0 =					
	10000.	1000.	100.	10.	1.	0.
1	1.0000	1.0000	0.9999	0.9991	0.9978	0.9974
2	0.9996	0.9996	0.9996	0.9995	0.9995	0.9995
3	0.9997	0.9997	0.9996	0.9994	0.9992	0.9991
4	0.9997	0.9997	0.9995	0.9989	0.9980	0.9978
5	1.0000	0.9999	0.9995	0.9966	0.9932	0.9924
6	0.9995	0.9995	0.9993	0.9981	0.9969	0.9966
7	0.9995	0.9995	0.9995	0.9994	0.9994	0.9994
8	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
9	0.9999	0.9988	0.9892	0.9474	0.9146	0.9083
10	1.0000	0.9999	0.9994	0.9975	0.9963	0.9961
11	1.0000	1.0000	0.9999	0.9996	0.9994	0.9994
12	1.0000	1.0000	0.9997	0.9991	0.9987	0.9987
13	1.0000	1.0000	0.9999	0.9995	0.9993	0.9993
14	1.0000	1.0000	0.9998	0.9995	0.9993	0.9993
15	1.0000	1.0000	0.9997	0.9992	0.9989	0.9989
16	0.9999	0.9999	0.9998	0.9996	0.9995	0.9995
17	0.9581	0.7772	0.6189	0.5698	0.5558	0.5538
18	0.8929	0.5748	0.4073	0.3765	0.3714	0.3707
19	0.8469	0.5375	0.4246	0.4016	0.3977	0.3972
20	0.7065	0.3304	0.2203	0.1941	0.1895	0.1889
21	0.9998	0.9998	0.9998	0.9997	0.9997	0.9997
22	1.0000	1.0000	0.9999	0.9995	0.9993	0.9992
23	1.0000	0.9999	0.9996	0.9983	0.9977	0.9976
24	1.0000	0.9996	0.9964	0.9880	0.9844	0.9838
25	1.0000	0.9999	0.9989	0.9965	0.9956	0.9955

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF252 MATNO = 7196
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.35608E+01	0.9999	0.9999	0.9998	0.9988	0.9974	0.9970
2	0.39758E+01	1.0000	1.0000	1.0000	0.9999	1.0000	0.9999
3	0.36085E+01	1.0000	1.0000	0.9999	0.9998	0.9995	0.9994
4	0.35639E+01	1.0000	1.0000	0.9999	0.9993	0.9986	0.9984
5	0.46755E+01	1.0004	1.0003	0.9999	0.9976	0.9949	0.9942
6	0.63099E+01	1.0001	1.0000	1.0004	1.0013	1.0024	1.0026
7	0.73895E+01	1.0000	1.0000	1.0000	1.0001	1.0002	1.0002
8	0.79309E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
9	0.13594E+02	0.9997	0.9991	0.9947	0.731	0.9548	0.9509
10	0.19867E+02	1.0000	1.0000	0.9997	0.9988	0.9982	0.9983
11	0.21094E+02	1.0002	1.0002	1.0002	1.0000	0.9999	0.9999
12	0.21939E+02	1.0000	1.0000	1.0000	0.9998	0.9998	0.9997
13	0.22864E+02	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
14	0.23995E+02	1.0000	1.0000	0.9999	0.9998	0.9997	0.9997
15	0.25294E+02	1.0000	1.0000	0.9999	0.9999	0.9998	0.9998
16	0.25621E+02	1.0000	1.0000	0.9998	0.9996	0.9998	0.9998
17	0.23123E+02	0.9946	0.9654	0.9193	0.8974	0.8921	0.8913
18	0.23118E+02	0.9861	0.9297	0.8697	0.8483	0.8445	0.8439
19	0.21503E+02	0.9849	0.9384	0.9032	0.8918	0.8890	0.8888
20	0.23138E+02	0.9563	0.8627	0.8079	0.7900	0.7863	0.7858
21	0.18256E+02	1.0000	1.0000	0.9999	0.9998	0.9995	0.9995
22	0.18490E+02	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
23	0.18598E+02	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
24	0.18648E+02	1.0000	1.0001	0.9999	1.0000	1.0000	1.0000
25	0.18671E+02	1.0000	1.0000	0.9999	0.9997	0.9997	0.9997

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF252 MATNO = 7196
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.29047E-02	1.0000	0.9999	0.9994	0.9960	0.9911	0.9897
2	0.53058E-02	1.0002	1.0002	1.0000	0.9999	0.9999	0.9998
3	0.83022E-02	1.0000	1.0000	1.0001	1.0009	1.0019	1.0022
4	0.14740E-01	1.0009	1.0009	1.0006	0.9993	0.9969	0.9962
5	0.34701E-01	1.0005	1.0003	0.9991	0.9918	0.9840	0.9820
6	0.80800E-01	1.0001	1.0002	1.0005	1.0027	1.0051	1.0057
7	0.14458E+00	1.0000	1.0000	1.0001	1.0004	1.0007	1.0008
8	0.19106E+00	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
9	0.25016E+00	1.0000	0.9997	0.9972	0.9871	0.9779	0.9759
10	0.40159E+00	1.0003	1.0002	0.9990	0.9947	0.9923	0.9919
11	0.72568E+00	1.0000	1.0000	0.9995	0.9980	0.9972	0.9971
12	0.15621E+01	0.9997	0.9996	0.9986	0.9954	0.9939	0.9936
13	0.22630E+01	0.9999	0.9999	0.9997	0.9992	0.9990	0.9990
14	0.25238E+01	0.9998	0.9998	0.9997	0.9995	0.9994	0.9994
15	0.27745E+01	1.0000	1.0000	0.9998	0.9995	0.9993	0.9993
16	0.37494E+01	1.0000	1.0000	0.9997	0.9992	0.9990	0.9989
17	0.62108E+01	0.9644	0.7769	0.4891	0.3657	0.3366	0.3325
18	0.89862E+01	0.9120	0.5586	0.2003	0.0985	0.0831	0.0812
19	0.80969E+01	0.8654	0.4590	0.1624	0.0847	0.0726	0.0711
20	0.23631E+02	0.7971	0.3687	0.1307	0.0682	0.0580	0.0568
21	0.17413E+00	1.0000	1.0000	0.9998	0.9993	0.9990	0.9989
22	0.38198E+00	1.0000	0.9999	0.9990	0.9961	0.9945	0.9942
23	0.93472E+00	1.0000	0.9998	0.9987	0.9940	0.9917	0.9913
24	0.28435E+01	0.9999	0.9989	0.9910	0.9691	0.9594	0.9582
25	0.58901E+01	1.0000	0.9998	0.9986	0.9962	0.9951	0.9950

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CF252 MATNO = 7196
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X-SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.25275E+01	0.9999	0.9999	0.9998	0.9995	0.9991	0.9989
2	0.22295E+01	0.9999	0.9999	0.9999	1.0001	1.0001	1.0002
3	0.23475E+01	0.9998	0.9998	0.9998	0.9999	1.0001	1.0002
4	0.24654E+01	1.0002	1.0002	1.0001	1.0000	1.0001	1.0001
5	0.20561E+01	0.9998	0.9998	1.0004	1.0039	1.0078	1.0088
6	0.86540E+00	1.0000	0.9999	0.9988	0.9929	0.9865	0.9850
7	0.19557E+00	1.0000	1.0000	0.9998	0.9994	0.9988	0.9986
8	0.13395E+00	1.0000	1.0000	1.0000	1.0001	1.0002	1.0002
9	0.12388E+00	1.0000	1.0000	1.0001	1.0007	1.0009	1.0007
10	0.18603E+00	1.0000	0.9999	0.9988	0.9951	0.9929	0.9925
11	0.34212E+00	1.0000	0.9999	0.9994	0.9977	0.9969	0.9967
12	0.56536E+00	1.0000	1.0000	0.9994	0.9977	0.9968	0.9967
13	0.87118E+00	0.9998	0.9998	0.9993	0.9984	0.9976	0.9977
14	0.13605E+01	1.0000	0.9999	0.9995	0.9985	0.9979	0.9978
15	0.20303E+01	1.0000	0.9999	0.9994	0.9977	0.9970	0.9969
16	0.31502E+01	1.0000	1.0000	0.9999	0.9994	0.9992	0.9992
17	0.13005E+02	0.9551	0.7189	0.3628	0.2341	0.2108	0.2078
18	0.23594E+02	0.9120	0.5586	0.2003	0.0985	0.0831	0.0812
19	0.21258E+02	0.8654	0.4590	0.1624	0.0847	0.0726	0.0711
20	0.62045E+02	0.7971	0.3687	0.1307	0.0682	0.0580	0.0568
21	0.45658E+00	1.0000	1.0000	1.0000	0.9994	0.9991	0.9991
22	0.10017E+01	1.0000	0.9999	0.9990	0.9961	0.9945	0.9942
23	0.24440E+01	1.0000	0.9998	0.9984	0.9940	0.9916	0.9912
24	0.56167E+01	0.9999	0.9994	0.9950	0.9831	0.9776	0.9769
25	0.96068E+01	1.0000	0.9998	0.9986	0.9963	0.9951	0.9950

NUCLID = CF252 MAT NUMBER = 7196

TABLE OF ELASTIC MATRICES

GROUP	EXIT GROUP	** KK **	KK = I + J - 1
1	J = 1	2	
1	3.54001E+00	2.07986E-02	
2	3.95424E+00	2.15665E-02	
3	3.58692E+00	2.15735E-02	
4	3.54518E+00	1.86902E-02	
5	4.63591E+00	3.96153E-02	
6	6.24237E+00	6.75256E-02	
7	7.30690E+00	8.26278E-02	
8	7.84016E+00	9.07876E-02	
9	1.34087E+01	1.85695E-01	
10	1.96530E+01	2.13919E-01	
11	2.08705E+01	2.23900E-01	
12	2.17063E+01	2.33069E-01	
13	2.26217E+01	2.42088E-01	
14	2.37380E+01	2.56819E-01	
15	2.50235E+01	2.70658E-01	
16	2.53759E+01	2.45303E-01	
17	2.29292E+01	1.94259E-01	
18	2.29247E+01	1.92994E-01	
19	2.12963E+01	2.06897E-01	
20	2.29500E+01	1.87970E-01	
21	1.80645E+01	1.91861E-01	
22	1.82976E+01	1.92059E-01	
23	1.84034E+01	1.94293E-01	
24	1.84531E+01	1.94577E-01	
25	1.86710E+01	0.0	

NUCLID = CF252 MAT NUMBER = 7196

TABLE OF INEL+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
	1	1	2	3	4						
	11	12	13								
1	2,83989E-04	1,61246E-03	1,18785E-02	5,93329E-02	1,25619E-01	2,63783E-01	2,84929E-01	2,27737E-01	1,06229E-01	3,16371E-02	
	5,52702E-03	0,0	0,0								
2	4,79652E-03	4,99908E-02	2,23283E-01	3,17606E-01	2,89863E-01	1,29205E-01	4,53761E-02	1,41195E-02	3,29049E-03	4,89173E-04	
	0,0	4,25240E-03	7,51894E-03								
3	3,05376E-02	2,08214E-01	2,87183E-01	2,95141E-01	1,38786E-01	4,62167E-02	1,44314E-02	3,86590E-03	6,47833E-04	0,0	
	0,0	0,0	0,0								
4	1,25807E-01	2,62405E-01	3,54157E-01	1,93677E-01	7,16617E-02	2,42905E-02	6,55852E-03	1,08997E-03	0,0	0,0	
	0,0	0,0	0,0								
5	1,94743E-01	6,04679E-01	4,43299E-01	2,21181E-01	8,86017E-02	2,45242E-02	4,14807E-03	0,0	0,0	0,0	
	0,0	0,0	0,0								
6	3,44210E-01	4,80233E-01	4,97165E-01	2,80328E-01	1,24734E-01	2,54842E-02	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0								
7	8,45938E-02	1,02400E-01	8,58106E-02	2,06474E-01	5,28325E-02	0,0	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0								
8	5,09768E-03	1,38106E-02	7,14193E-02	1,87233E-02	0,0	0,0	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0								
9	3,63887E-04	8,40897E-03	1,12574E-02	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0								

NUCLID = CFFPD MAT NO = 7197
 INFINITE DILUTION CROSS SECTION

GROUP	TOTAL	FISSION	NU	CAPTURE	ELASTIC	INELA	N2N	EL MU	EL REMOVAL
1	4.41684E+00	0.0	0.0	1.13818E-02	2.24874E+00	2.10085E+00	5.58746E-02	7.40447E-01	5.26729E-02
2	4.34008E+00	0.0	0.0	1.77283E-02	2.13732E+00	2.18503E+00	0.0	5.95233E-01	6.09808E-02
3	5.00813E+00	0.0	0.0	3.28965E-02	2.81168E+00	2.16355E+00	0.0	5.42673E-01	6.39759E-02
4	6.11102E+00	0.0	0.0	5.81028E-02	4.19907E+00	1.85385E+00	0.0	4.81853E-01	8.27717E-02
5	6.96301E+00	0.0	0.0	9.66893E-02	6.09422E+00	7.72104E-01	0.0	4.08066E-01	1.13776E-01
6	6.86831E+00	0.0	0.0	1.46430E-01	6.44490E+00	2.76974E-01	0.0	3.74894E-01	1.01153E-01
7	6.43544E+00	0.0	0.0	2.29947E-01	6.14268E+00	6.28145E-02	0.0	2.32765E-01	1.28723E-01
8	6.18078E+00	0.0	0.0	3.61081E-01	5.80495E+00	1.47506E-02	0.0	5.90803E-02	1.40817E-01
9	6.04979E+00	0.0	0.0	5.81491E-01	5.46830E+00	0.0	0.0	5.74762E-03	1.18410E-01
10	6.13402E+00	0.0	0.0	9.58413E-01	5.17560E+00	0.0	0.0	5.74762E-03	1.13160E-01
11	6.61814E+00	0.0	0.0	1.57845E+00	5.03969E+00	0.0	0.0	5.74762E-03	1.12007E-01
12	7.25489E+00	0.0	0.0	2.25489E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11948E-01
13	7.83837E+00	0.0	0.0	2.83837E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11123E-01
14	8.57809E+00	0.0	0.0	3.57809E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11985E-01
15	9.49590E+00	0.0	0.0	4.49590E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11948E-01
16	1.06178E+01	0.0	0.0	5.61778E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11124E-01
17	1.13802E+01	0.0	0.0	6.38025E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11985E-01
18	1.19483E+01	0.0	0.0	6.94825E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11124E-01
19	1.25689E+01	0.0	0.0	7.56893E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11985E-01
20	1.32446E+01	0.0	0.0	8.24457E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11948E-01
21	1.39708E+01	0.0	0.0	8.97082E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11948E-01
22	1.48441E+01	0.0	0.0	9.84410E+00	5.00000E+00	0.0	0.0	5.74762E-03	1.11124E-01
23	1.82443E+01	0.0	0.0	1.32443E+01	5.00000E+00	0.0	0.0	5.74762E-03	1.11986E-01
24	2.44363E+01	0.0	0.0	1.94363E+01	5.00000E+00	0.0	0.0	5.74762E-03	1.11950E-01
25	3.34932E+01	0.0	0.0	2.84932E+01	5.00000E+00	0.0	0.0	1.30707E-02	0.0

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CFFPD MATNO = 7197
 REACTION = TOTAL
 TEMPERATURE = 300. K

GROUP	10000.	1000.	100.	10.	1.	0.
1	0.9990	0.9990	0.9990	0.9986	0.9979	0.9977
2	1.0000	0.9999	0.9999	0.9997	0.9993	0.9991
3	1.0000	1.0000	0.9998	0.9989	0.9972	0.9967
4	1.0000	1.0000	0.9998	0.9985	0.9966	0.9960
5	1.0000	1.0000	0.9999	0.9995	0.9990	0.9989
6	0.9995	0.9995	0.9994	0.9992	0.9989	0.9988
7	0.9995	0.9995	0.9995	0.9992	0.9989	0.9988
8	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
9	1.0000	0.9999	0.9999	0.9999	0.9999	0.9998
10	0.9997	0.9997	0.9996	0.9995	0.9994	0.9993
11	0.9997	0.9997	0.9996	0.9990	0.9981	0.9979
12	1.0000	1.0000	0.9999	0.9997	0.9993	0.9992
13	1.0000	1.0000	0.9999	0.9995	0.9991	0.9990
14	1.0000	1.0000	0.9999	0.9994	0.9988	0.9986
15	1.0000	1.0000	0.9999	0.9992	0.9985	0.9983
16	1.0000	1.0000	0.9998	0.9990	0.9983	0.9981
17	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
18	1.0000	1.0000	1.0000	0.9998	0.9997	0.9996
19	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996
20	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996
21	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
22	1.0000	1.0000	0.9999	0.9995	0.9991	0.9991
23	1.0000	0.9998	0.9982	0.9927	0.9891	0.9884
24	1.0000	0.9997	0.9973	0.9904	0.9870	0.9865
25	1.0000	0.9995	0.9961	0.9869	0.9834	0.9829

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CFFPD MATNO = 7197
 REACTION = ELASTIC
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.22487E+01	0.9999	0.9999	0.9999	0.9994	0.9986	0.9983
2	0.21373E+01	1.0001	1.0001	1.0001	0.9996	0.9987	0.9984
3	0.28117E+01	1.0000	1.0000	0.9998	0.9985	0.9962	0.9953
4	0.41991E+01	1.0000	1.0000	0.9995	0.9966	0.9929	0.9917
5	0.60942E+01	1.0000	1.0000	0.9999	0.9995	0.9988	0.9986
6	0.64449E+01	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
7	0.61427E+01	1.0000	1.0000	0.9999	0.9996	0.9992	0.9990
8	0.58049E+01	1.0000	1.0000	1.0000	0.9998	0.9995	0.9994
9	0.54683E+01	1.0000	1.0000	1.0000	0.9997	0.9993	0.9992
10	0.51756E+01	1.0000	1.0000	1.0000	0.9998	0.9996	0.9995
11	0.50397E+01	1.0000	1.0000	1.0000	0.9998	0.9996	0.9996
12	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
13	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9997	0.9997
14	0.50000E+01	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
15	0.50000E+01	1.0000	1.0000	1.0000	0.9998	0.9998	0.9998
16	0.50000E+01	1.0000	1.0000	1.0001	0.9999	0.9998	0.9998
17	0.50000E+01	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999
18	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
19	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998
20	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9999	0.9999
21	0.50000E+01	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
22	0.50000E+01	1.0000	1.0000	1.0000	0.9999	0.9998	0.9998
23	0.50000E+01	1.0000	1.0000	0.9998	0.9998	0.9998	0.9998
24	0.50000E+01	1.0000	1.0000	0.9998	0.9998	0.9998	0.9998
25	0.50000E+01	1.0000	1.0000	0.9997	0.9996	0.9997	0.9997

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CFFPD MATNO = 7197
 REACTION = CAPTURE
 TEMPERATURE = 300. K

GROUP	INFINITE DILU		SIGMA 0 =				
	X-SECTION	10000.	1000.	100.	10.	1.	0.
1	0.11382E-01	1.0000	1.0000	1.0001	1.0011	1.0029	1.0035
2	0.17728E-01	1.0000	1.0000	0.9999	0.9993	0.9981	0.9977
3	0.32896E-01	1.0000	0.9999	0.9995	0.9968	0.9921	0.9905
4	0.58103E-01	1.0000	1.0000	0.9995	0.9957	0.9904	0.9888
5	0.96689E-01	1.0000	1.0000	0.9999	0.9992	0.9982	0.9979
6	0.14643E+00	1.0000	1.0000	1.0002	1.0008	1.0019	1.0022
7	0.22995E+00	1.0000	1.0000	1.0002	1.0009	1.0021	1.0024
8	0.36108E+00	1.0000	1.0000	1.0000	1.0002	1.0005	1.0006
9	0.58149E+00	1.0000	1.0000	1.0000	1.0004	1.0008	1.0009
10	0.95841E+00	1.0000	1.0000	0.9999	0.9993	0.9984	0.9981
11	0.15785E+01	1.0000	1.0000	0.9997	0.9982	0.9962	0.9957
12	0.22549E+01	1.0000	1.0000	0.9999	0.9994	0.9988	0.9986
13	0.28384E+01	1.0000	1.0000	0.9999	0.9993	0.9986	0.9984
14	0.35781E+01	1.0000	1.0000	0.9999	0.9991	0.9983	0.9981
15	0.44959E+01	1.0000	1.0000	0.9998	0.9990	0.9982	0.9980
16	0.56178E+01	1.0000	1.0000	0.9998	0.9990	0.9982	0.9981
17	0.63802E+01	1.0000	1.0000	1.0000	0.9998	0.9999	0.9998
18	0.69483E+01	1.0000	1.0000	1.0000	0.9998	0.9997	0.9997
19	0.75689E+01	1.0000	1.0000	1.0000	0.9998	0.9997	0.9996
20	0.82446E+01	1.0000	1.0000	1.0001	0.9999	0.9998	0.9997
21	0.89708E+01	1.0000	1.0000	0.9999	0.9997	0.9996	0.9996
22	0.98441E+01	1.0000	1.0000	0.9999	0.9995	0.9991	0.9992
23	0.13244E+02	1.0000	0.9998	0.9991	0.9947	0.9920	0.9915
24	0.19436E+02	1.0000	0.9998	0.9984	0.9937	0.9913	0.9909
25	0.28493E+02	1.0000	0.9997	0.9974	0.9922	0.9900	0.9897

TABLE OF SELF-SHIELDING FACTORS

NUCLIDE = CFFPD MATNO = 7197
 REACTION = FISSION
 TEMPERATURE = 300. K

GROUP	INFINITE DILU X=SECTION	SIGMA 0 =					
		10000.	1000.	100.	10.	1.	0.
1	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
8	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
9	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
17	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
19	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
23	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25	0.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

NUCLID = CFFPD MAT NUMBER = 7197

TABLE OF ELASTIC MATRICES

GROUP I	EXIT J =	GROUP	** KK **		KK = I + J - 1
			1	2	
1	2.19606E+00	5.26729E-02			
2	2.07534E+00	6.09808E-02			
3	2.74770E+00	6.39759E-02			
4	4.11630E+00	8.27716E-02			
5	5.98044E+00	1.13776E-01			
6	6.34375E+00	1.01153E-01			
7	6.01395E+00	1.28723E-01			
8	5.66413E+00	1.40817E-01			
9	5.34989E+00	1.18411E-01			
10	5.06244E+00	1.13160E-01			
11	4.92768E+00	1.12008E-01			
12	4.88805E+00	1.11948E-01			
13	4.88888E+00	1.11124E-01			
14	4.88802E+00	1.11985E-01			
15	4.88805E+00	1.11948E-01			
16	4.88888E+00	1.11124E-01			
17	4.88802E+00	1.11985E-01			
18	4.88805E+00	1.11948E-01			
19	4.88888E+00	1.11124E-01			
20	4.88802E+00	1.11985E-01			
21	4.88805E+00	1.11948E-01			
22	4.88888E+00	1.11124E-01			
23	4.88801E+00	1.11986E-01			
24	4.88805E+00	1.11950E-01			
25	5.00000E+00	0.0			

NUCLID = CFFPD MAT NUMBER = 7197
 TABLE OF INEL+(N,2N) MATRICES

GROUP	J=	EXIT	GROUP	** KK **	KK = I + J - 1	5	6	7	8	9	10
1	1	11	2	12	13	14					
1	2,16421E-03	5,36585E-02	2,55269E-01	6,24881E-01	5,68790E-01	4,17784E-01	1,77712E-01	6,95433E-02	3,06856E-02	9,71911E-03	
	1,80591E-03	0,0	2,12113E-04	3,75051E-04							
2	4,10241E-02	2,42490E-01	6,84414E-01	5,91663E-01	3,94728E-01	1,58509E-01	5,28144E-02	1,51810E-02	3,53550E-03	6,65628E-04	
	0,0	0,0	0,0	0,0							
3	5,10234E-02	4,21202E-01	6,16922E-01	6,35278E-01	2,98830E-01	9,94895E-02	3,10741E-02	8,33663E-03	1,39775E-03	0,0	
	0,0	0,0	0,0	0,0							
4	2,34411E-01	4,93712E-01	6,20589E-01	3,31302E-01	1,20428E-01	4,04846E-02	1,10702E-02	1,85051E-03	0,0	0,0	
	0,0	0,0	0,0	0,0							
5	1,31235E-01	2,91538E-01	1,96330E-01	9,92278E-02	4,07735E-02	1,11359E-02	1,86394E-03	0,0	0,0	0,0	
	0,0	0,0	0,0	0,0							
6	4,56268E-02	4,27610E-02	1,02637E-01	6,36170E-02	1,90139E-02	3,31830E-03	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0	0,0							
7	1,37825E-03	2,70033E-02	1,86986E-02	8,94906E-03	6,78534E-03	0,0	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0	0,0							
8	4,31888E-04	4,16236E-04	5,09471E-03	8,80774E-03	0,0	0,0	0,0	0,0	0,0	0,0	
	0,0	0,0	0,0	0,0							