

RR_UNC - Calculate uncertainties in reaction rates

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Reference x.s. file : IRDFF-v1-05.g60
 Source spectrum file : IRDFF-v1-05_sp.g60
 Reaction rate integ.flag : 1
 Reaction rate norm. flag : 1

Spectrum MAT No. : 9903
 Spectrum Integral : 1.128E+00
 Spectrum average energy [eV] : 6.003E+04
 Spectrum peak energy [eV] : 2.898E+04
 Reaction rate RR = spectrum integral

No.	Mat.	MT	E(50%) [MeV]	<RR>	+/- [mb]	Unc	Unc. x.s. [%]	Unc. Sp. [%]	Unc. Total [%]
1	3006	105	0.04169	1.0117E+03	+/-	1.997E+00	0.20	0.00	0.20
2	5000	1	0.04703	5.5432E+03	+/-	0.000E+00	0.00	0.00	0.00
3	5000	2	0.04862	4.8520E+03	+/-	0.000E+00	0.00	0.00	0.00
4	5000	101	0.03615	6.9029E+02	+/-	0.000E+00	0.00	0.00	0.00
5	5000	102	0.02076	1.4870E-01	+/-	0.000E+00	0.00	0.00	0.00
6	5000	103	0.07115	4.8883E-04	+/-	0.000E+00	0.00	0.00	0.00
7	5000	107	0.03616	6.9014E+02	+/-	0.000E+00	0.00	0.00	0.00
8	5010	1	0.04439	6.3373E+03	+/-	0.000E+00	0.00	0.00	0.00
9	5010	2	0.05554	2.8645E+03	+/-	0.000E+00	0.00	0.00	0.00
10	5010	107	0.03616	3.4679E+03	+/-	0.000E+00	0.00	0.00	0.00
11	5010	800	0.03781	2.3175E+02	+/-	1.805E+00	0.78	0.00	0.78
12	5010	801	0.03604	3.2362E+03	+/-	6.065E+00	0.19	0.00	0.19
13	11023	1	0.0454	5.7549E+03	+/-	0.000E+00	0.00	0.00	0.00
14	11023	2	0.04541	5.7531E+03	+/-	0.000E+00	0.00	0.00	0.00
15	11023	102	0.03494	1.8820E+00	+/-	1.881E-01	9.99	0.00	9.99
16	15031	103	0.78203	2.4220E-12	+/-	8.591E-13	35.47	0.00	35.47
17	16032	103	1.02012	2.4274E-17	+/-	2.853E-18	11.75	0.00	11.75
18	21045	1	0.0379	1.1817E+04	+/-	0.000E+00	0.00	0.00	0.00
19	21045	2	0.03794	1.1740E+04	+/-	0.000E+00	0.00	0.00	0.00
20	21045	102	0.03259	6.8887E+01	+/-	4.748E+00	6.89	0.00	6.89
21	22047	103	0.9488	4.8741E-13	+/-	3.378E-14	6.93	0.00	6.93
22	25055	1	0.03483	1.2657E+04	+/-	0.000E+00	0.00	0.00	0.00
23	25055	102	0.02579	3.3267E+01	+/-	2.028E+00	6.10	0.00	6.10
24	26054	103	0.75554	4.4845E-12	+/-	8.654E-13	19.30	0.00	19.30
25	26058	1	0.04776	1.2425E+04	+/-	0.000E+00	0.00	0.00	0.00
26	26058	102	0.0374	1.5182E+01	+/-	2.455E+00	16.17	0.00	16.17
27	27059	1	0.03261	1.1466E+04	+/-	0.000E+00	0.00	0.00	0.00
28	27059	2	0.03263	1.1432E+04	+/-	0.000E+00	0.00	0.00	0.00
29	27059	102	0.02706	3.4823E+01	+/-	8.835E-01	2.54	0.00	2.54
30	27059	103	0.84671	8.3227E-16	+/-	7.431E-16	89.28	0.00	89.28
31	27059	107	0.38818	6.7503E-11	+/-	6.499E-11	96.28	0.00	96.28
32	28058	103	0.46573	8.4539E-09	+/-	5.713E-10	6.76	0.00	6.76
33	29063	1	0.04212	9.5457E+03	+/-	0.000E+00	0.00	0.00	0.00
34	29063	2	0.04226	9.4734E+03	+/-	0.000E+00	0.00	0.00	0.00
35	29063	102	0.02585	7.2218E+01	+/-	6.926E+00	9.59	0.00	9.59
36	30064	103	0.55195	1.4170E-09	+/-	2.545E-10	17.96	0.00	17.96
37	30067	103	0.02299	1.9236E-02	+/-	4.809E-03	25.00	0.00	25.00
38	41093	1	0.05346	9.7609E+03	+/-	1.503E+02	1.54	0.00	1.54
39	41093	2	0.05413	9.4927E+03	+/-	4.601E+02	4.85	0.00	4.85
40	41093	102	0.02947	2.6552E+02	+/-	2.058E+00	0.78	0.00	0.78
41	41093	41093m	0.10877	4.9048E-01	+/-	3.471E-02	7.08	0.00	7.08
42	41093	41094g	0.02947	6.6309E+01	+/-	0.000E+00	0.00	0.00	0.00
43	41093	41094m	0.02947	1.9921E+02	+/-	0.000E+00	0.00	0.00	0.00
44	42092	41092m	1.05574	3.8253E-16	+/-	9.608E-17	25.12	0.00	25.12
45	45103	45103m	0.13219	4.9211E+00	+/-	1.471E+00	29.88	0.00	29.88
46	47109	1	0.04971	9.1836E+03	+/-	0.000E+00	0.00	0.00	0.00
47	47109	47110n	0.04227	5.7988E+01	+/-	3.911E+00	6.74	0.00	6.74
48	48000	1	0.05047	8.4170E+03	+/-	0.000E+00	0.00	0.00	0.00
49	48000	2	0.05114	8.0782E+03	+/-	0.000E+00	0.00	0.00	0.00
50	48000	101	0.03543	3.3882E+02	+/-	0.000E+00	0.00	0.00	0.00
51	48000	102	0.03543	3.3882E+02	+/-	0.000E+00	0.00	0.00	0.00
52	48000	103	0.05038	1.1283E-07	+/-	0.000E+00	0.00	0.00	0.00
53	48000	107	0.16066	8.5284E-06	+/-	0.000E+00	0.00	0.00	0.00
54	49113	1	0.04795	7.6118E+03	+/-	0.000E+00	0.00	0.00	0.00
55	49113	2	0.04978	6.6826E+03	+/-	0.000E+00	0.00	0.00	0.00
56	49113	102	0.03593	9.5762E+02	+/-	0.000E+00	0.00	0.00	0.00
57	49113	49113m	0.44813	1.7218E-05	+/-	3.131E-06	18.18	0.00	18.18

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rr_unc_9903.1st
58 49113 49114g 0.03249 2.4620E+02 +/- 6.794E+00 2.76 0.00 2.76
59 49113 49114m 0.03715 7.1142E+02 +/- 1.974E+01 2.77 0.00 2.77
60 49115 1 0.04849 7.4942E+03 +/- 0.000E+00 0.00 0.00 0.00
61 49115 2 0.05014 6.7189E+03 +/- 0.000E+00 0.00 0.00 0.00
62 49115 102 0.03506 7.7285E+02 +/- 0.000E+00 0.00 0.00 0.00
63 49115 49115m 0.39142 1.4678E-04 +/- 6.813E-06 4.64 0.00 4.64
64 49115 49116g 0.03505 1.6228E+02 +/- 6.546E+00 4.03 0.00 4.03
65 49115 49116n 0.03506 6.1057E+02 +/- 2.463E+01 4.03 0.00 4.03
66 57139 1 0.04684 7.2203E+03 +/- 0.000E+00 0.00 0.00 0.00
67 57139 2 0.04693 7.1750E+03 +/- 0.000E+00 0.00 0.00 0.00
68 57139 102 0.02954 4.1784E+01 +/- 4.479E+00 10.72 0.00 10.72
69 64000 1 0.04415 1.1327E+04 +/- 0.000E+00 0.00 0.00 0.00
70 64000 2 0.04457 1.0335E+04 +/- 0.000E+00 0.00 0.00 0.00
71 64000 101 0.03337 8.6671E+02 +/- 0.000E+00 0.00 0.00 0.00
72 64000 102 0.03337 8.6671E+02 +/- 0.000E+00 0.00 0.00 0.00
73 73181 1 0.04431 1.2292E+04 +/- 0.000E+00 0.00 0.00 0.00
74 73181 2 0.04446 1.0579E+04 +/- 0.000E+00 0.00 0.00 0.00
75 73181 102 0.03172 7.5286E+02 +/- 2.902E+01 3.85 0.00 3.85
76 74186 1 0.04243 1.4201E+04 +/- 0.000E+00 0.00 0.00 0.00
77 74186 2 0.04242 1.3985E+04 +/- 0.000E+00 0.00 0.00 0.00
78 74186 102 0.03748 1.9248E+02 +/- 3.698E+00 1.92 0.00 1.92
79 79197 1 0.04448 1.3665E+04 +/- 0.000E+00 0.00 0.00 0.00
80 79197 2 0.04488 1.3006E+04 +/- 0.000E+00 0.00 0.00 0.00
81 79197 102 0.0328 6.1845E+02 +/- 9.439E+00 1.53 0.00 1.53
82 80199 80199m 0.58734 2.1900E-06 +/- 2.813E-07 12.85 0.00 12.85
83 90232 1 0.04704 1.5527E+04 +/- 0.000E+00 0.00 0.00 0.00
84 90232 2 0.04696 1.4869E+04 +/- 0.000E+00 0.00 0.00 0.00
85 90232 18 0.06211 2.7332E-03 +/- 2.645E-03 96.78 0.00 96.78
86 90232 102 0.03485 4.8775E+02 +/- 7.633E+00 1.56 0.00 1.56
87 92235 1 0.04662 1.4996E+04 +/- 0.000E+00 0.00 0.00 0.00
88 92235 18 0.04232 2.2105E+03 +/- 1.018E+01 0.46 0.00 0.46
89 92235 102 0.03866 6.9361E+02 +/- 2.238E+02 32.26 0.00 32.26
90 92238 1 0.04698 1.4906E+04 +/- 0.000E+00 0.00 0.00 0.00
91 92238 18 0.05123 8.0126E-02 +/- 8.291E-03 10.35 0.00 10.35
92 92238 102 0.03396 3.9585E+02 +/- 5.298E+00 1.34 0.00 1.34
93 93237 1 0.04668 1.4577E+04 +/- 0.000E+00 0.00 0.00 0.00
94 93237 2 0.04724 1.2155E+04 +/- 0.000E+00 0.00 0.00 0.00
95 93237 18 0.05223 2.0172E+01 +/- 4.158E+00 20.61 0.00 20.61
96 94239 1 0.04661 1.5088E+04 +/- 0.000E+00 0.00 0.00 0.00
97 94239 2 0.04648 1.2180E+04 +/- 0.000E+00 0.00 0.00 0.00
98 94239 18 0.04795 1.8233E+03 +/- 9.273E+00 0.51 0.00 0.51
99 95241 1 0.0476 1.5310E+04 +/- 0.000E+00 0.00 0.00 0.00
100 95241 2 0.04872 1.2806E+04 +/- 0.000E+00 0.00 0.00 0.00
101 95241 18 0.04801 1.8064E+01 +/- 6.803E-01 3.77 0.00 3.77

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