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JEF-2/FPY

JEF-2 Fission Product Yield Data

by the NEA Data Bank

Brief summary of contents

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Abstract: This document gives a brief documentation of the JEF-2 Fission Product Yield Data library which is available from the IAEA Nuclear Data Section on CD-ROM, free of charge.

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Note:

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IAEA-NDS-reports are updated whenever there is additional information of relevance to the users of the data library.

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Citation guidelines:

JEF-2 Fission Product Yield Data

This database is a special data library of the Joint Evaluated File (JEF-2) of the OECD Nuclear Energy Agency Data Bank (see document IAEA-NDS-120 Rev. 2).

The evaluated fission product yield data are based on UKFY2, the UK Fission-Product Yield Library, version 2, of 1991 by M. James and R. Mills. The UKFY2 file which is documented in IAEA-NDS-124 contains in 7 files additional information such as chain yields, fractional independent yields, and bibliographic references.

The data library was released in 1994 by the NEA Data Bank. The format of the library is ENDF-6 as documented in IAEA-NDS-76. The size of the library is 46 000 records.

The data library includes independent yields (MF/MT = 8/454) and cumulative yields (MF/MT = 8/459) of fission products from the neutron induced fission of 19 nuclides at different incident neutron energies and data for 3 spontaneously fissioning nuclides as indicated in the following table.

MAT	nuclides	incident neutron energy		
9061	90-Th-232		0.4 MeV	14.7 MeV
9234	92-U-233	0.0253 eV	0.4 MeV	14.7 MeV
9237	92-U-234		0.4 MeV	
9240	92-U-235	0.0253 eV	0.4 MeV	14.7 MeV
9243	92-U-236		0.4 MeV	
9249	92-U-238		0.4 MeV	14.7 MeV
9346	93-Np-237	0.0253 eV	0.4 MeV	
9349	93-Np-238	0.0253 eV	0.4 MeV	
9437	94-Pu-238	0.0253 eV	0.4 MeV	
9440	94-Pu-239	0.0253 eV	0.4 MeV	
9443	94-Pu-240		0.4 MeV	
9446	94-Pu-241	0.0253 eV	0.4 MeV	
9449	94-Pu-242		0.4 MeV	
9543	95-Am-241	0.0253 eV	0.4 MeV	
9547	95-Am-242m	0.0253 eV	0.4 MeV	
9549	95-Am-243	0.0253 eV	0.4 MeV	
9637	96-Cm-242			spontaneous
9640	96-Cm-243	0.0253 eV	0.4 MeV	
9643	96-Cm-244	0.0253 eV	0.4 MeV	sponstaneous
9646	96-Cm-245	0.0253 eV	0.4 MeV	
9861	98-Cf-252			spontaneous