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JEF-2/TSL

JEF-2 Thermal Neutron Scattering Law Data Library

by

J. Keinert and M. Mattes

Brief summary of contents

H.D. Lemmel (ed.)

Abstract: This document gives a brief documentation of the JEF-2 Thermal Neutron Scattering Law data library available free of charge on CD-ROM from the IAEA Nuclear Data Section.

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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).

Thermal Neutron Scattering Law data were evaluated in 1971/72 for JEF-1 by J. Keinert, and converted to ENDF-5 format by M. Mattes, both at the Institut für Kernenergie, Stuttgart, Germany. For the JEF-2 version the data have been revised in 1982/1984, a new evaluation for Be has been added, and the data have been converted to ENDF-6 format.

Data are given for

	MAT	
H bound in H ₂ O	1	
D bound in D ₂ O	11	
Be	26	(new)
C bound in graphite	31	
H bound in polyethylene (CH2)	37	

The size of the library is 117 429 records. More detailed documentation can be found in the introductory text for each material. The data library was released in 1994 by the NEA Data Bank as tape 21 of the JEF-2 library.