INTERNATIONAL ATOMIC ENERGY AGENCY



NUCLEAR DATA SERVICES

DOCUMENTATION SERIES OF THE IAEA NUCLEAR DATA SECTION

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The JENDL-3.3 fission-product yield data library

Compiled by T. Nakagawa (JAERI)

Contents and documentation

H.D. Lemmel, P.K.McLaughlin

Abstract: This data library contains neutron-induced fission-product yield data for ten fissile nuclides, some of them at 3 incident neutron energies, including independent yields and cumulative yields, supplemented with data for Am-241 and AM-243 as taken over from ENDF/B The data library, which is in ENDF-6 format, is available, cost free, on Cd-ROM, or on http://www-nds.iaea.org/j33/j33fy.htm

JENDL-3.2 data were automatically transformed to JENDL-3.3.

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Online: TELNET or FTP: iaeand.iaea.org

username: IAEANDS for interactive Nuclear Data Information System

usernames: ANONYMOUS for FTP file transfer;

FENDL2 for FTP file transfer of FENDL-2.0;

RIPL for FTP file transfer of RIPL;

NDSONL for FTP access to files sent to NDIS "open" area.

Web: http://www-nds.iaea.org

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:

JENDL-3.2/FPY

The JENDL-3.2 fission-product yield data library compiled by T. Nakagawa (JAERI)

This data library contains evaluated data for independent and cumulative fission-product yields following neutron induced fission for ten fissile nuclides. The following fissile systems are included:

| nuclide | incident neutron energies | | |
|--------------------------------|---------------------------|------------------------------|----------------------------|
| 90-Th-232 | | fast | 14 MeV |
| 92-U-233 235 236 238 | thermal thermal | fast fast fast fast | 14 MeV 14 MeV 14 MeV |
| 93-Np-237 | | fast | |
| 94-Pu-239 240 241 242 | thermal thermal | fast fast fast fast | 14 MeV |

The file is supplemented with data for Am-241 and Am-243 as taken over from ENDF/B. The format of the data library is ENDF-6 as documented in IAEA-NDS-76.

Origin of the data:

The evaluated data have been taken over from JNDC-FP2, the fission product nuclear data library of the Japanese Nuclear Data Committee, and converted to ENDF-6 format. See the document IAEA-NDS-51 for a documentation of JNDC-FP2, which had been published in two reports:

- K. Tasaka et al., JAERI-1320 (Sept. 1990)
- H. Ihara (ed.), JAERI-M-89-204 (Nov. 1989)

A decay data file of fission product (FP) nuclides has been developed for the use in nuclear technology field as one of special purpose files of JENDL (Japanese Evaluated Nuclear Data Library) in the format of ENDF/B and it is called JENDL FP Decay Data File 2000.

J. Katakura et al., JAERI -1343 (July 2001)