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“Maslov”

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Evaluated neutron reaction data for Th-232, Pa, U, Np, Pu, Am and Cm isotopes

by
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Summary documentation

by H.D. Lemmel, V.G. Pronyaev and O. Schwerer

Abstract: The nuclear data file by V.M. Maslov et al includes evaluated neutron reaction data for Th-232, Pa-231,233,U-232, 233, 234, 238, Np-238, Pu-238, Pu-242, Am-241, 242-g, 242-m, 243, Cm-243, 245, 246 in ENDF-6 format. The data are available from the IAEA Nuclear Data Section, costfree upon request. 2003-2004 updates include new evaluations for Th-232 Pa-231, 233 and U-232, 233, 234, 238 isotopes.

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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 guideline:

This database should be cited as follows:

V. Maslov et al., Evaluated neutron nuclear data for Pu, Am and Cm isotopes, reports INDC(BLR)-2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 (1995-98); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{232}Th , report INDC(BLR)-014 (2003); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{232}U , report INDC(BLR)-015 (2003); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{233}U , report INDC(BLR)-018 (2003); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{234}U , report INDC(BLR)-017 (2003); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{238}U , report INDC(BLR)-016 (2003); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{231}Pa , report INDC(BLR)-019 (2004); data files received from the IAEA Nuclear Data Section.

V. Maslov et al., Neutron Data Evaluation of ^{233}Pa , report INDC(BLR)-020 (2004); data files received from the IAEA Nuclear Data Section.

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Evaluated neutron reaction data
for Th-232, Pa, U, Np, Pu, Am and Cm isotopes

by
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This data library was received from the authors in several parts between September 1996 and February 1998. It is in ENDF-6 format. The following table shows the nuclides included and the INDC reports which contain the description of the evaluation. A brief documentation is included in the text part (MF/MT=1451) of the data files.

The data files (basic and point-wise presentation for 0° and 300°K temperatures) and the reports published electronically are available online through the hyperlinks below or can be received cost free upon request sent to the IAEA Nuclear Data Section (see addresses at the front page of this document).

Nuclide	Data File			Report
90-Th-232	Basic	0°K	300°K	INDC(BLR)-16 (2003)
91-Pa-231	Basic	0°K	300°K	INDC(BLR)-19 (2004)
91-Pa-233	Basic	0°K	300°K	INDC(BLR)-20 (2004)
92-U-232	Basic	0°K	300°K	INDC(BLR)-15 (2003)
92-U-233	Basic	0°K	300°K	INDC(BLR)-18 (2003)
92-U-234	Basic	0°K	300°K	INDC(BLR)-17 (2003)
93-U-238	Basic	0°K	300°K	INDC(BLR)-14 (2003)
93-Np-238	Basic	0°K	300°K	INDC(BLR)-11 (1998)
94-Pu-238	Basic	0°K	300°K	INDC(BLR)-9 (1997)
94-Pu-242	Basic	0°K	300°K	INDC(BLR)-10 (1997)
95-Am-241	Basic	0°K	300°K	INDC(BLR)-5 (1996)
95-Am-242-g	Basic	0°K	300°K	INDC(BLR)-8 (1997)
95-Am-242-m	Basic	0°K	300°K	INDC(BLR)-7 (1997)
95-Am-243	Basic	0°K	300°K	INDC(BLR)-6 (1996)

96-Cm-243	Basic	0°K	300°K	INDC(BLR)-2 (1995)
96-Cm-245	Basic	0°K	300°K	INDC(BLR)-3 (1995)
96-Cm-246	Basic	0°K	300°K	INDC(BLR)-4 (1996)

These data have been evaluated under contract from JAERI, Japan and under Project Agreement B404 (ISTC, Moscow) with Japan as financing party of the Project. The data were expected to be included, with or without modifications, in a forthcoming version of the Japanese data library JENDL or other evaluated data libraries.

The same authors had evaluated earlier

[92-U-233, see report INDC\(BLR\)-1 \(1993\),](#)

which was included in the BROND data library together with other actinide evaluations from the same institute.