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EVALUATED NEUTRONIC DATA FILE FOR YTTRIUM*

by

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ABSTRACT

A comprehensive evaluated neutronic data file for yttrium is presented and documented. The file extends from thermal neutron energies to 20 MeV, and includes all reactions necessary for comprehensive neutronic calculations. The input data base, the requisite theoretical calculations, the evaluation methods and results, and outstanding problem areas, are described. Attention is given to quantitative uncertainty specification and to energy conservation among various reaction products and the photon-production data. The file is presented in the ENDF-format system, and has been transmitted to the National Nuclear Data Center, Brookhaven National Laboratory.

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