EVALUATED NUCLEAR DATA FILES FOR THE
NATURALLY-OCCURRING ISOTOPES OF CADMIUM

by

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ABSTRACT

Comprehensive neutron evaluated data files for the naturally-occurring isotopes of cadmium are deduced from experimental data and nuclear models, and presented in the ENDF/B-VI formats. Particular attention is given to those processes relevant to fuel-cycle and fission-product applications. Comparisons are made with prior evaluations of the cadmium isotopes, and discrepancies and consistencies cited. Some of the discrepancies are very large (e.g., as much as 100%), and the differences have the potential for a pronounced impact on applications usage. The present files are comprehensive, including may important processes that are not represented in the contemporary ENDF/B-VI system. Recommendations are made for future measurements where appropriate.