# Evaluated nuclear data for neutron transport calculations in structural & fissionable materials at energies up to 250 MeV

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Evaluated nuclear data for use in the neutron transport problems have been developed.

The evaluated nuclear data are obtained for structural materials ($^{51}$V, $^{52}$Cr, $^{56}$Fe) at neutron energies up to 250 MeV and fissionable and fissile isotopes: $^{238}$U, $^{239}$Pu at neutron energies up to 50 MeV, $^{240}$Pu and $^{235}$U up to 100 and 300 MeV accordingly.

The evaluated nuclear data files include information on total reaction cross-sections, cross-sections for elastic and inelastic interactions of neutrons with nuclei, fission cross-sections and number of neutrons per fission (for fissionable materials), cross-sections of (n,2n), (n,3n), (n,4n), (n,p), (n,np), (n,2n), (n,$\alpha$), (n,n$\alpha$) reactions and others, threshold reaction cross-sections as well as energy and angular distributions of secondary neutrons, protons and alphas.

Evaluated nuclear data are recorded in ENDF-6 format.

At the energies below 20 MeV the data were adjusted with account of ENDF/B-VI and JENDL-3 data.

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