ENDF/B-IV EU-152
resonance total cross section
ENDF/B-IV EU-152
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-IV EU-152
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-IV EU-152
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

- Capture
ENDF/B-IV EU-152 resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-IV EU-152
resonance absorption cross sections

Capture cross section vs. energy in MeV.
ENDF/B-IV EU-152
resonance absorption cross sections

capture
ENDF/B-IV EU-152
UR total cross section

The graph shows the total cross section for the ENDF/B-IV EU-152 isotopic uranium (UR) as a function of energy. The cross section is plotted in barns (1 barn = 10^{-24} m²) on the vertical axis against energy in MeV on the horizontal axis. Four curves are depicted, each representing different concentrations of uranium.

- **Inf. Dil.** (Infinitely Diluted): The highest cross section curve.
- **100 b**: A curve that is slightly lower than Inf. Dil.
- **1 b**: The lowest curve among the depicted.

As energy increases, the cross section decreases, indicating an inverse relationship between energy and cross section.
ENDF/B-IV EU-152
UR elastic cross section

Cross section (barns)

Energy (MeV)
ENDF/B-IV EU-152
UR capture cross section

Cross section (barns)

Energy (MeV)
ENDF/B-IV EU-152
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic

Energy (MeV)
ENDF/B-IV EU-152
Heating

Energy (MeV) vs. Heating (MeV/reaction)

- Heating peaks at different energy levels,
- Two prominent peaks with a valley in between.
ENDF/B-IV EU-152 Damage

Energy (MeV) vs. Damage (MeV-barns) graph
ENDF/B-IV EU-152
Non-threshold reactions

Energy (MeV)

Cross section (barns)

- (n,gma)
- (n,p)
- (n,a)
- (n,xp)
- (n,xa)
ENDF/B-IV EU-152
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,2n)
(n,3n)
(n,n*)a
(n,n*)p
(n,n*c)
ENDF/B-IV EU-152
Threshold reactions

Cross section (barns)

Energy (MeV)

*(n,d)*
*(n,t)*
*(n,he3)*
*(n,xd)*
*(n,xt)*
ENDF/B-IV EU-152
Threshold reactions

Cross section (barns)

Energy (MeV)

\[(n, xhe3)\]
ENDF/B-IV EU-152
angular distribution for elastic
ENDF/B-IV EU-152
angular distribution for (n,2n)
ENDF/B-IV EU-152
angular distribution for \((n,n^*)a\)
ENDF/B-IV EU-152
angular distribution for (n,n*)p
ENDF/B-IV EU-152
angular distribution for (n,n*1)
ENDF/B-IV EU-152
angular distribution for (n,n*2)
ENDF/B-IV EU-152
angular distribution for \((n,n^3)\)
ENDF/B-IV EU-152
angular distribution for (n,n\*4)
ENDF/B-IV EU-152
angular distribution for \( (n,n^*5) \)
ENDF/B-IV EU-152
angular distribution for (n,n*c)