ENDF/B-VII Y-90
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
ENDF/B-VII Y-90
resonance total cross section
ENDF/B-VII Y-90
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII Y-90
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

Capture
ENDF/B-VII Y-90
UR elastic cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII Y-90
UR capture cross section

Energy (MeV)

Cross section (barns)

- Inf. Dil.
- 100 b
ENDF/B-VII Y-90
Damage

Energy (MeV)

Damage (MeV-barns)

damage
ENDF/B-VII Y-90
Non-threshold reactions

Cross section (barns)

Energy (MeV)

(n,gma)
ENDF/B-VII Y-90
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
ENDF/B-VII Y-90
Inelastic levels

Cross section (barns) vs. Energy (MeV)
ENDF/B-VII Y-90
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
ENDF/B-VII Y-90
Threshold reactions

Cross section (barns)

Energy (MeV)

(n,2np)
(n,n^c)
(n,xp)
(n,xa)
(n,p^0)
ENDF/B-VII Y-90
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,p*6)
(n,p*7)
(n,p*8)
(n,p*9)
(n,p*10)
ENDF/B-VII Y-90
Threshold reactions

Cross section (barns)

Energy (MeV)

*10^{-6}

(n,p^{*11})
(n,p^{*12})
(n,p^{*13})
(n,p^{*14})
(n,p^{*15})
ENDF/B-VII Y-90
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,p\*16)
- (n,p\*c)
- (n,a\*0)
- (n,a\*1)
- (n,a\*2)
ENDF/B-VII Y-90
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a*3)
(n,a*4)
(n,a*5)
(n,a*6)
(n,a*7)
ENDF/B-VII Y-90
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII Y-90
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII Y-90
Threshold reactions

Cross section (barns) vs. Energy (MeV)
ENDF/B-VII Y-90
angular distribution for elastic
ENDF/B-VII Y-90
angular distribution for (n,n*1)
ENDF/B-VII Y-90
angular distribution for (n,n*2)
ENDF/B-VII Y-90
angular distribution for (n,n*4)

Energy (MeV)

Energies:
-1.0, 0.0, 0.5, 1.0, 1.5, 2.0

Cosine

Prob/Cos

0.1 0.0 0.5 1.0

0.0 0.5 1.0 1.5 2.0

1.0 1.5 2.0 2.5 3.0
ENDF/B-VII Y-90
angular distribution for (n,n*5)
ENDF/B-VII Y-90
angular distribution for (n,n*6)
ENDF/B-VII Y-90
angular distribution for (n,n*7)
ENDF/B-VII Y-90
angular distribution for (n,n*8)
ENDF/B-VII Y-90 angular distribution for \((n,n^{*9})\)
Neutron emission for (n,2n)

ENDF/B-VII Y-90
ENDF/B-VII Y-90
Neutron emission for (n,n*)a

Prob/MeV

Sec. Energy

Energy (MeV)
ENDF/B-VII Y-90
Neutron emission for \((n,n^*)p\)
ENDF/B-VII Y-90
Neutron emission for (n,2np)
ENDF/B-VII Y-90 Neutron emission for \((n,n^*c)\)
ENDF/B-VII Y-90
Photon emission for (n,2n)
ENDF/B-VII Y-90
Photon emission for (n,3n)
ENDF/B-VII Y-90
Photon emission for (n,2n)a

\[ E^\gamma (\text{MeV}) \]

\[ E^\nu (\text{MeV}) \]

\[ \text{Prob/Mev} \]

\[ 10^{-1}, 10^{-3}, 10^{0} \]
ENDF/B-VII Y-90
Photon emission for (n,2np)
ENDF/B-VII Y-90
Photon emission for (n,n^c)
ENDF/B-VII Y-90
Photon emission for (n,a*c)
ENDF/B-VII Y-90

thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII Y-90
Particle heating contributions

Energy (MeV)

MeV/collision

protons
alphas

Energy (MeV)
ENDF/B-VII Y-90
Recoil Heating

Heating (MeV/reaction) vs. Energy (MeV) graph.
ENDF/B-VII Y-90
protons from \((n,n^*)p\)
ENDF/B-VII Y-90
protons from (n,2np)
ENDF/B-VII Y-90 angular distribution for (n,p*0) proton
ENDF/B-VII Y-90
angular distribution for (n,p*1) proton
Angular distribution for (n,p*2) proton

ENDF/B-VII Y-90

Energy (MeV)
angular distribution for (n,p*3) proton
ENDF/B-VII Y-90 angular distribution for (n,p*4) proton
ENDF/B-VII Y-90
angular distribution for (n, p*5) proton
ENDF/B-VII Y-90 angular distribution for (n,p*6) proton
angular distribution for (n,p*8) proton
ENDF/B-VII Y-90
angular distribution for (n,p*9) proton
ENDF/B-VII Y-90 angular distribution for \((n,p^{*11})\) proton
ENDF/B-VII Y-90
angular distribution for (n,p*12) proton

Energy (MeV)
ENDF/B-VII Y-90
angular distribution for (n,p*13) proton
ENDF/B-VII Y-90 angular distribution for (n,p*14) proton
ENDF/B-VII Y-90 angular distribution for (n,p*15) proton
ENDF/B-VII Y-90 angular distribution for \((n,p^*16)\) proton
ENDF/B-VII Y-90 protons from (n,p*c)
ENDF/B-VII Y-90
alphas from (n,n*)a
ENDF/B-VII Y-90
alphas from (n,2n)a
ENDF/B-VII Y-90 angular distribution for (n,a*0) alpha
ENDF/B-VII Y-90 angular distribution for (n,a*1) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*2) alpha
ENDF/B-VII Y-90
angular distribution for \((n,a^*3)\) alpha
ENDF/B-VII Y-90 angular distribution for (n,a*4) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*5) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*6) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*7) alpha
ENDF/B-VII Y-90 angular distribution for (n,a*8) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*9) alpha
ENDF/B-VII Y-90 angular distribution for (n,a*11) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*12) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*13) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*14) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*15) alpha
ENDF/B-VII Y-90
angular distribution for (n,a*17) alpha
ENDF/B-VII Y-90 alphas from (n,a*c)