ENDF/B-VII ND-144
resonance total cross section

Energy (MeV) vs Cross section (barns) graph.
ENDF/B-VII ND-144
resonance total cross section

Energy (MeV)

Cross section (barns)
ENDF/B-VII ND-144
resonance absorption cross sections

capture

Cross section (barns)

Energy (MeV)
ENDF/B-VII ND-144
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII ND-144
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII ND-144
UR total cross section

Cross section (barns)
Energy (MeV)
ENDF/B-VII ND-144
UR elastic cross section
ENDF/B-VII ND-144
UR capture cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII ND-144
Heating

Energy (MeV)

Heating (MeV/reaction)

heating
ENDF/B-VII ND-144
Non-threshold reactions

Energy (MeV)

Cross section (barns)
ENDF/B-VII ND-144
Principal cross sections

Energy (MeV) vs. Cross section (barns)

- Total
- Absorption
- Elastic
- Gamma production
ENDF/B-VII ND-144
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
ENDF/B-VII ND-144
Inelastic levels

Energy (MeV)

*10^-3

Cross section (barns)

(n,n*21)  (n,n*22)  (n,n*23)  (n,n*24)  (n,n*25)

Energy (MeV)
ENDF/B-VII ND-144
Inelastic levels

Cross section (barns)

Energy (MeV)
ENDF/B-VII ND-144
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*36)
(n,n*37)
(n,n*38)
(n,n*39)
ENDF/B-VII ND-144
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,a*6)
- (n,a*7)
- (n,a*8)
- (n,a*9)
- (n,a*10)
angular distribution for elastic
ENDF/B-VII ND-144

angular distribution for (n,n*1)

Prob/Cos

Energy (MeV)
ENDF/B-VII ND-144
angular distribution for (n,n*2)
ENDF/B-VII ND-144
angular distribution for (n,n^3)
angular distribution for (n,n*4)

ENFD/B-VII ND-144

Prob/Cos

Energy (MeV)

0 10 12 14 16 18 20

-1.0 -0.5 0.0 0.5 1.0

Cosine

0

2 4 6 8 10
ENDF/B-VII ND-144
angular distribution for (n,n*5)
ENDF/B-VII ND-144
angular distribution for \((n,n^\ast 6)\)
ENDF/B-VII ND-144
angular distribution for (n,n*7)
angular distribution for (n,n^8)
ENDF/B-VII ND-144
angular distribution for (n,n*9)
ENF/B-VII ND-144 angular distribution for ($n,n^*10$)
ENDF/B-VII ND-144
angular distribution for (n,n*11)
ENDF/B-VII ND-144
angular distribution for (n,n*12)
ENDF/B-VII ND-144
angular distribution for (n,n*13)
ENDF/B-VII ND-144 angular distribution for (n,n*14)
ENDF/B-VII ND-144
angular distribution for \((n,n^*15)\)
Angular distribution for (n,n*16)
ENDF/B-VII ND-144
angular distribution for (n,n*17)
ENDF/B-VII ND-144
angular distribution for (n,n*19)
ENDF/B-VII ND-144
angular distribution for (n,n*20)
ENDF/B-VII ND-144
angular distribution for (n,n*21)
ENDF/B-VII ND-144
angular distribution for \((n,n^*22)\)
ENDF/B-VII ND-144
angular distribution for (n,n*23)
ENDF/B-VII ND-144
angular distribution for (n,n*24)
ENDF/B-VII ND-144
angular distribution for (n,n*26)
angular distribution for (n,n*27)
ENDF/B-VII ND-144
angular distribution for \((n,n^*28)\)
ENDF/B-VII ND-144
angular distribution for \((n,n^*29)\)
ENDF/B-VII ND-144
angular distribution for \((n,n^*30)\)
ENDF/B-VII ND-144
angular distribution for (n,n*31)
ENDF/B-VII ND-144
angular distribution for (n,n*32)
ENDF/B-VII ND-144
angular distribution for (n,n*33)
ENDF/B-VII ND-144
angular distribution for (n,n*34)
ENDF/B-VII ND-144
angular distribution for (n,n*35)
ENDF/B-VII ND-144
angular distribution for (n,n*36)
ENDF/B-VII ND-144
angular distribution for (n,n*38)
ENDF/B-VII ND-144

angular distribution for \( (n,n^{*39}) \)
ENDF/B-VII ND-144
Neutron emission for (n,2n)
ENDF/B-VII ND-144
Neutron emission for \((n,3n)\)
ENDF/B-VII ND-144
Neutron emission for \((n,n^*)a\)
ENDF/B-VII ND-144
Neutron emission for (n,2n)a
ENDF/B-VII ND-144
Neutron emission for (n,n*c)
ENDF/B-VII ND-144
Photon emission for (n,2n)
Photon emission for (n,3n)

ENDF/B-VII ND-144

Photon emission for (n,3n)
ENDF/B-VII ND-144
Photon emission for \( (n,n^*)a \)
ENDF/B-VII ND-144
Photon emission for (n,2n)a
ENDF/B-VII ND-144
Photon emission for (n,n*)p
ENDF/B-VII ND-144
Photon emission for (n,2np)
ENDF/B-VII ND-144
Photon emission for (n,n'c)
ENDF/B-VII ND-144
Photon emission for (n,gma)
ENDF/B-VII ND-144
Photon emission for (n,a*c)
ENDF/B-VII ND-144
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII ND-144
14 MeV photon spectrum
Recoil Heating

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

- Heating values range from 0 to 120 MeV/reaction.
- Energy values range from 0 to 20 MeV.
- The graph shows a trend of increasing heating with increasing energy.

ENDF/B-VII ND-144
ENDF/B-VII ND-144 protons from (n,n*)p

Energy (MeV)

Sec. Energy

Primary

Secondary
ENDF/B-VII ND-144
protons from (n,2np)
ENDF/B-VII ND-144
angular distribution for (n,p*0) proton

Energy (MeV)

ProB|Cos

Cosine

-1.0 -0.5 0.0 0.5 1.0
ENDF/B-VII ND-144
protons from \((n,p^*c)\)
ENDF/B-VII ND-144
alphas from (n,n*)a
ENDF/B-VII ND-144 alphas from (n,2n)
ENDF/B-VII ND-144 angular distribution for (n,α*0) alpha
ENDF/B-VII ND-144

angular distribution for (n,a*1) alpha

Energy (MeV)

Cosine

Prob/Cos

1.0 0.5 0.0 -0.5 -1.0

1.0 0.5 0.0 -0.5 -1.0
ENDF/B-VII ND-144
angular distribution for (n,a*2) alpha
ENDF/B-VII ND-144
angular distribution for (n,a*4) alpha
ENDF/B-VII ND-144
angular distribution for (n,a*5) alpha

Energy (MeV)

CoSine

Prob/Cos
ENDF/B-VII ND-144
angular distribution for (n,a*6) alpha
ENDF/B-VII ND-144
angular distribution for (n,a*7) alpha
Figure showing angular distribution for (n,a*8) alpha.
ENDF/B-VII ND-144
angular distribution for (n,a*10) alpha