48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Energy (MeV)

Cross section (barns)

- total
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Cross section (barns)

Energy (MeV)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

- Energy (MeV)
- Cross section (barns)

- Capture

Graph showing the cross section as a function of energy with two resonance peaks.
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ resonance absorption cross sections

Capture cross section as a function of energy (MeV).
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

![Graph showing cross-sections versus energy](image)

- **Energy (MeV)**
  - $10^{-3}$
  - $10^{-2}$

- **Cross section (barns)**
  - $10^{-3}$
  - $10^{-2}$
  - $10^{-1}$
  - $10^0$
  - $10^1$
  - $10^2$

- **Capture**
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV) vs. Cross section (barns)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR total cross section

Cross section (barns)

Energy (MeV)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

UR elastic cross section

Energy (MeV) vs Cross section (barns) graph

- Inf. Dil.
- 100 b
- 1 b

The graph shows the elastic cross section as a function of energy in MeV, with logarithmic scales for both axes.
48-CDB-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR capture cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
1 b
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

Damage (MeV-barns)

Energy (MeV)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Energy (MeV) vs. Cross section (barns)

- (n,n*6)
- (n,n*7)
- (n,n*8)

Energy (MeV):
0 2 4 6 8 10 12 14 16 18 20

Cross section (barns):
0 50 100 150 200 250 300 350 x 10^-3
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,x)
(n,2n)
(n,3n)
(n,n*)a
(n,n*)p

0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0

0 20 40 60 80 100 120 140 160 180 200
Energy (MeV)
Threshold reactions

48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

- $(n,n^*)d$
- $(n,n^*)t$
- $(n,n^*)c$
- $(n,p)$
- $(n,d)$
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)

*10^3

(n,t)  (n,he3)  (n,a)
Threshold reactions

Cross section (barns) vs Energy (MeV)

- (n,xp)
- (n,xd)
- (n,xt)
- (n,xhe3)
- (n,xa)
angular distribution for elastic
angular distribution for elastic
Neutron emission for (n,x)
Neutron emission for (n,2n)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,3n)
Neutron emission for (n,n*)a
Neutron emission for \((n,n^*)p\)
Neutron emission for (n,n*)d

Energy (MeV)

Sec. Energy

Prob/MeV

1 2 3 4

16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0

1 10^{-2} 10^{0} 10^{2} 10^{4}
Neutron emission for $(n,n^*)t$
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,n*c)
Photon emission for (n,x)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
14 MeV photon spectrum
Particle heating contributions
Recoil Heating

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

- Line graph showing the trend of recoil heating with energy.
Particle production cross sections

- Protons
- Deuterons
- Tritons
- He-3
- Alphas

Energy (MeV) vs Cross section (barns)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,x)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ deuterons from (n,x)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
tritons from (n,x)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
he3s from (n,x)
48-CD-112 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,x)