Principal cross sections

48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Cross section (barns)

Energy (MeV)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60
resonance absorption cross sections
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Capture cross section vs. Energy (MeV)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ UR total cross section

Energy (MeV) vs Cross section (barns)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR elastic cross section

Energy (MeV) vs Cross section (barns)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR capture cross section
Non-threshold reactions

\[ \text{Cross section (barns)} \]

\[ \text{Energy (MeV)} \]

\[ (n,gma) \]
Principal cross sections

- Total
- Absorption
- Elastic
- Gamma production

Energy (MeV) vs. Cross section (barns)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

Energy (MeV)

Damage (MeV-barns)

0.0
0.1
0.2
0.3
0.4
0.5
0.6

0 50 100 150 200

Energy (MeV)

Damage (MeV-barns)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

10^{-2}

10^{-3}

10^{-4}

Energy (MeV)

Cross section (barns)

(n,gma)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*1)
- (n,n*2)
- (n,n*3)
- (n,n*4)
- (n,n*5)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

[Graph showing the cross section versus energy for various reactions: (n,x), (n,2n), (n,3n), (n,n*)a, (n,n*)p.]
Threshold reactions

Cross section (barns)

Energy (MeV)

48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,t)
- (n,he3)
- (n,a)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns) vs. Energy (MeV)
- (n,xp)
- (n,xd)
- (n,xt)
- (n,xhe3)
- (n,xa)
angular distribution for elastic

\[ \text{Prob|Cos} \]

\[ \text{Energy (MeV)} \]

\[ \text{Cosine} \]
angular distribution for elastic
Neutron emission for (n,x)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,2n)
48-CD-114 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 \((n,n^*)p\)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,n*)d

![Graph of neutron emission probability vs. energy](image-url)
Neutron emission for (n,n*)t
Neutron emission for (n, n^*c)
Photon emission for (n,x)
Photon emission for (n,2n)
Photon emission for \((n,3n)\)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
14 MeV photon spectrum
Particle heating contributions

- protons
- deuterons
- tritons
- he-3
- alphas

Energy (MeV) vs. MeV/collision
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Recoil Heating

![Graph showing the relationship between energy and heating energy per reaction. The graph has a y-axis labeled Heating (MeV/reaction) and an x-axis labeled Energy (MeV). The line on the graph is labeled "recoil heating."
Particle production cross sections

Cross section (barns) vs. Energy (MeV)

- protons
- deuterons
- tritons
- he-3
- alphas
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
deuterons from (n,x)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ tritons from (n,x)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
he3s from (n,x)
48-CD-114 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,x)