Principal cross sections

![Graph showing cross sections as a function of energy (MeV)]

- **Total**
- **Absorption**
- **Elastic**
- **Gamma production**
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Principal cross sections

Energy (MeV)

Cross section (barns)

- Total
- Absorption
- Elastic
- Gamma production
Non-threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,gma)
- (n,a)
- (n,xa)
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Inelastic levels

Cross section (barns)

Energy (MeV)
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Inelastic levels

Cross section (barns)

Energy (MeV)

(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+ Inelastic levels

![Graph showing inelastic level cross sections](image)
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Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*16)
- (n,n*17)
- (n,n*18)
- (n,n*19)
- (n,n*20)

Energy (MeV)
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Threshold reactions

- (n,n*)d
- (n,2np)
- (n,n*c)
- (n,p)
- (n,d)

Energy (MeV)

Cross section (barns)

Energy (MeV)
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Threshold reactions

![Graph showing cross-sections for different reactions vs energy.](image-url)
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Threshold reactions

![Graph showing cross section (in barns) vs. energy (in MeV) for different threshold reactions: (n,a^1), (n,a^2), (n,a^3), (n,a^4), (n,a^5).]
angular distribution for elastic
angular distribution for elastic
angular distribution for (n,n*1)
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angular distribution for (n,n*2)
angular distribution for (n,n*3)
angular distribution for \((n,n^*4)\)
angular distribution for (n,n*5)
angular distribution for \((n,n^*6)\)
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angular distribution for (n,n*7)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
angular distribution for \((n, n^*8)\)
angular distribution for (n,n*9)
angular distribution for (n,n*10)
angular distribution for (n,n*11)
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angular distribution for (n,n*12)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
angular distribution for (n,n*13)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
angular distribution for (n,n*15)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
angular distribution for (n,n*17)
angular distribution for (n,n*18)
angular distribution for (n,n*19)
angular distribution for (n,n*20)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Neutron emission for \((n,x)\)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Neutron emission for (n,2n)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Neutron emission for (n,n*)a
Neutron emission for (n,2n)a
Neutron emission for \((n,n^*)p\)
Neutron emission for (n,n*)d
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Neutron emission for (n,2np)
Neutron emission for \((n,n\ast c)\)
Photon emission for (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Photon emission for \((n,2n)\)
Photon emission for (n,n*)a
Photon emission for (n,2n)a
Photon emission for $(n,n^*)p$
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Photon emission for (n,n*c)
Photon emission for (n,gma)
Photon emission for (n,2a)
Photon emission for (n,α*c)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
14 MeV photon spectrum
Particle heating contributions

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

Energy (MeV) vs. MeV/collision for various particles.
Recoil Heating

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

- Energy (MeV) range from 0 to 200
- Heating (MeV/reaction) range from 0 to 4.0

The graph shows the recoil heating as a function of energy.
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
Particle production cross sections

Energy (MeV)

Cross section (barns)

protons
deuterons
tritons
he-3
alphas
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
protons from (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
protons from (n,n*)p

![Graph showing the probability of emission versus energy. The x-axis represents energy (MeV), the y-axis represents secondary energy, and the z-axis represents probability. Peaks are observed at specific energy levels.]
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
protons from (n,pt)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
protons from (n,p*c)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
deuterons from (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+ deuterons from (n,n*)d
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
tritons from (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
tritons from (n,pt)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+ he3s from (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
alphas from (n,x)
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+ alphas from (n,n*)a
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
alphas from (n,2n)a

Probl/MeV

10^-2

10^0

10^2

Sec. Energy

5

10

10

Energy (MeV)

14

16

18

20
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
alphas from (n,2a)
angular distribution for (n,a*0) alpha
angular distribution for (n,a^1) alpha
angular distribution for (n,a*2) alpha
angular distribution for (n,a*) alpha
angular distribution for (n,a*4) alpha
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angular distribution for (n,a*5) alpha
8-O-17 FOR FENDL-3.2 PROCESSED BY NJOY2016.60+
angular distribution for \((n,a^*6)\) alpha
angular distribution for (n,a*7) alpha
angular distribution for (n,a*8) alpha
angular distribution for (n,a*9) alpha