12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

![Graph showing the total cross section as a function of energy (MeV). The x-axis represents energy in MeV, ranging from $10^{-2}$ to $10^{-1}$, and the y-axis represents cross section in barns, ranging from $10^{0}$ to $10^{2}$. There are distinct peaks in the cross section at certain energies.]
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

![Graph showing the total cross section vs. Energy (MeV) on a log-log scale. The x-axis (Energy) ranges from $10^{-1}$ to $10^0$, and the y-axis (Cross section) ranges from $10^{-1}$ to $10^1$. The graph features a sharp peak at low energies and a plateau at higher energies. The line is labeled "total".]
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60

resonance total cross section

Cross section (barns)

Energy (MeV)

10^0

10^1

10^0

10^1

total
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

![Graph showing cross section vs. energy](image-url)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

![Graph showing cross section versus energy](attachment:image.png)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

![Graph showing cross section (barns) vs. energy (MeV)]
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

Heating

Heating (MeV/reaction)

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

![Graph showing the relationship between energy (MeV) and damage (MeV-barns). The x-axis represents energy in MeV, ranging from $10^{-11}$ to $10^1$, and the y-axis represents damage in MeV-barns, ranging from $10^{-5}$ to $10^{-1}$. The graph includes a logarithmic scale for both axes. The curve shows a sharp increase in damage at certain energy levels.](image-url)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

Energy (MeV)

Damage (MeV-barns)

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

Graph showing cross section (barns) vs. energy (MeV) for (n,gma) reactions.
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Energy (MeV)

*10^-3

Cross section (barns)

Energy (MeV)

(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ Inelastic levels

![Graph showing cross section vs. energy](image-url)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

![Graph showing cross-sections for (n,p) and (n,a) reactions vs. energy (MeV).]
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,xp)
(n,xd)
(n,xt)
(n,xhe3)
(n,xa)

Energy (MeV)
angular distribution for elastic
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for elastic
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,2n)
angular distribution for (n,n*)a
angular distribution for (n,n*)p
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*1)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*2)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*3)\)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*4)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*5)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n^*6)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*8)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*9)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*10)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*11)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*12)
angular distribution for (n,n*13)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*14)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*15)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*16)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*17)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*c)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,x)

![Graph showing neutron emission for (n,x) with probability per MeV on the y-axis, secondary energy on the x-axis, and energy (MeV) on the z-axis.](image-url)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,2n)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for \((n,n^*)a\)
Neutron emission for (n,n*c)
Prob/MeV

$10^{-1}$

$10^{-3}$

$0$

$E_y$ (MeV)

$10$

$20$

$E_n$ (MeV)

$8$

$10$

$12$

$14$

$16$

$18$

$20$

12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,2n)
Photon emission for (n,n*)a
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*c)
Phon emission for (n,gma)
Photon emission for (n,p)
Photon emission for (n,a)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,x)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
thermal capture photon spectrum
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
14 MeV photon spectrum
Particle heating contributions

Energy (MeV)

MeV/collision

Energy (MeV)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Recoil Heating
Particle production cross sections

Cross section (barns)

Energy (MeV)

protons
deuterons
tritons
he-3
alphas
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,x)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+ deuterons from (n,x)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
tritons from (n,x)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
he3s from (n,x)
12-MG-25 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,x)