28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section

[Graph showing the relationship between energy (MeV) and cross section (barns).]
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section

[Graph showing cross section vs. energy in barns]
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section

Cross section (barns)

Energy (MeV)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
Capture cross sections for 28-NI-64 from ENDF/B-VII by NJOY2016.60.
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections

![Graph showing cross section vs. energy (MeV)]

- Capture process indicated.

Energy (MeV) vs. Cross section (barns) with a logarithmic scale on the y-axis.
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+

Heating

![Graph showing heating vs. energy](image)
Non-threshold reactions

Energy (MeV)

Cross section (barns)

10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}

10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8} 10^{9} 10^{10} 10^{11} 10^{12}

(n,gma)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Principal cross sections

![Cross section graph]

- Total cross section
- Absorption cross section
- Elastic cross section
- Gamma production cross section

Energy (MeV)
Cross section (barns)
Non-threshold reactions

Cross section (barns) vs. Energy (MeV)

- Data source: ENDF/B-VII
- Created using NJOY2016.60+
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Inelastic levels

Cross section (barns) vs Energy (MeV)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

![Graph showing cross sections for different reactions as a function of energy.](image-url)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

2 4 6 8 10 12 14 16 18 20

*10^3

25

(n,p)

(n,d)

(n,a)
Threshold reactions

Cross section (barns) vs. Energy (MeV)
angular distribution for elastic
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for elastic
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Neutron emission for (n,x)
Neutron emission for (n,2n)
Neutron emission for \((n,n^*)a\)
Neutron emission for \((n,n^*)p\)
Neutron emission for (n,n*c)
Photon emission for (n,x)
Photon emission for (n,2n)
Photon emission for \((n,n^*)a\)

\[
P_{\gamma} / MeV = 10^{\gamma / (MeV)}
\]

\[
E_{\gamma} (MeV) = 2, 8, 10, 12
\]

\[
E_{n} (MeV) = 14, 16, 18, 20
\]
Photon emission for \((n,n^*)p\)
Photon emission for (n,n*\(c\))
Photon emission for (n,p)
Photon emission for (n,a)
Gamma Energy (MeV) vs. Gamma Prod (barns/MeV)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
14 MeV photon spectrum
Particle heating contributions

Energy (MeV)

MeV/collision

Protons
Deuterons
Tritons
Alphas

Energy (MeV)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+ Recoil Heating

![Graph showing the relationship between energy (MeV) and heating (MeV/reaction).](image-url)
Particle production cross sections

Energy (MeV) vs. Cross section (barns)

- Protons
- Deuterons
- Tritons
- Alphas
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
protons from (n,x)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
protons from (n,n*)p
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
protons from (n,p)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
tritons from (n,x)
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+ alphas from (n,n*)a
28-NI-64 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
alphas from (n,a)