ENDF/B-VII.1 AM-242
resonance total cross section

Energy (MeV) vs. Cross section (barns)
ENDF/B-VII.1 AM-242
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 AM-242
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

- Capture
- Fission
ENDF/B-VII.1 AM-242
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 AM-242
UR elastic cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 AM-242
UR fission cross section

Energy (MeV)

Cross section (barns)

10^{-4} 10^{-3} 10^{-2}

Inf. Dil. 100 b 1 b
ENDF/B-VII.1 AM-242
UR capture cross section

Energy (MeV)

Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b

Energy (MeV)

Cross section (barns)
ENDF/B-VII.1 AM-242
Damage

![Graph showing the energy-damage relationship for AM-242 isotope. The x-axis represents energy (MeV) on a log scale, ranging from $10^{-11}$ to $10^1$ MeV, and the y-axis represents damage (MeV-barns) on a log scale, ranging from $10^{-4}$ to $10^0$. The graph shows a sharp peak at an energy of $10^{-5}$ MeV, followed by a gradual decrease and then a rise up to $10^0$. The damage values are significant around the peak energy, indicating the most damage occurs in this energy range.](image-url)
ENDF/B-VII.1 AM-242
Non-threshold reactions

Energy (MeV)

Cross section (barns)

fission
(n,gma)
ENDF/B-VII.1 AM-242
Principal cross sections

Energy (MeV)

Cross section (barns)

total
absorption
elastic
ENDF/B-VII.1 AM-242
Heating

Energy (MeV)

Heating (MeV/reaction)

heating
ENDF/B-VII.1 AM-242
Non-threshold reactions

![Graph showing cross-sections for fission and (n,gamma) reactions as a function of energy. The x-axis represents energy in MeV, ranging from 0 to 20, and the y-axis represents cross-section in barns, ranging from $10^{-3}$ to $10^0$. The graph includes two lines: one for fission and another for (n,gamma) reactions. The fission line starts at a higher cross-section at lower energies and plateaus at a higher value compared to the (n,gamma) line.]
ENDF/B-VII.1 AM-242
Inelastic levels

- Energy (MeV)
  - 0
  - 2
  - 4
  - 6
  - 8
  - 10

- Cross section (barns)
  - $10^{-3}$
  - 10
  - 20
  - 30
  - 40

- Cross section (barns)
  - (n,n*16)
  - (n,n*17)
  - (n,n*18)
  - (n,n*19)
  - (n,n*20)
ENDF/B-VII.1 AM-242
Inelastic levels

Energy (MeV) vs. Cross section (barns)

Cross sections for (n,n*26), (n,n*27), (n,n*28), (n,n*29), and (n,n*30) are shown as functions of energy.

Energy range: 0 to 10 MeV
Cross section range: 0 to *10^-3 barns

- (n,n*26) in black
- (n,n*27) in red
- (n,n*28) in green
- (n,n*29) in blue
- (n,n*30) in purple
ENDF/B-VII.1 AM-242
Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*31)
- (n,n*32)
- (n,n*33)
ENDF/B-VII.1 AM-242
angular distribution for elastic
ENDF/B-VII.1 AM-242
angular distribution for (n,n*1)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*2)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*3)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*4)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*5)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*6)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*7)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*8)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*9)
Angular distribution for (n,n*10)

Energy (MeV)

Cosine

Prob/Cos

10^0

1.0 0.5 0.0 -0.5 -1.0

2 4 6 8 10 12 14 16 18 20
ENDF/B-VII.1 AM-242
angular distribution for (n,n*11)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*12)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*13)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*15)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*16)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*17)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*18)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*19)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*21)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*22)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*23)
ENDF/B-VII.1 AM-242
angular distribution for (n,n^25)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*26)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*28)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*29)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*30)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*32)
ENDF/B-VII.1 AM-242
angular distribution for (n,n*33)
ENDF/B-VII.1 AM-242
Total fission nubar

Energy (MeV)

Fission nubar

Energy (MeV)
ENDF/B-VII.1 AM-242
Neutron emission for (n,2n)
ENDF/B-VII.1 AM-242
Neutron emission for (n,3n)
ENDF/B-VII.1 AM-242
Neutron emission for fission
ENDF/B-VII.1 AM-242
Neutron emission for \((n,n^*c)\)