Isotopes of Roentgenium

Isotope	Atomic Mass	Half-life	Mode of Decay
Rg-272	272.1535	0.0015 seconds	α to Mt-268
Rg-279	279	0.17 seconds	α to Mt-275
Rg-280	280	3.60 seconds	α to Mt-276

Roentgenium was first synthesized in 1994 at the Gesellschaft für Schwerionenforschung (Institute for Heavy Ion Research — GSI) in Darmstadt, Germany, by an international team led by Sigurd Hofmann. Chemically, roentgenium should be in the same group as the elements copper, silver, and gold. Its name honors German physicist Wilhelm Conrad Röntgen (also spelled *Roentgen*), the discoverer of x-rays.

Roentgenium is calculated to have similar properties to its lighter homologues — copper, silver and gold — although it may show some differences as well. It is predicted to be a noble metal, and it is expected to be a solid under normal conditions and to crystallize in the body-centered cubic structure. All of its isotopes are extremely unstable and radioactive; in general, the heavier isotopes are more stable than the lighter.

Properties of Roentgenium

Name	Roentgenium
Symbol	Rg
Atomic number	111
Atomic weight	[280]
Standard state	Presumably a solid at 298 °K
CAS Registry ID	54386-24-2
Group in periodic table	11
Group name	None
Period in periodic table	7
Block in periodic table	d-block
Color	Unknown, but probably metallic and silvery white or grey in appearance
Melting point	No data available
Boiling point	No data available
Density of solid	28.70 g/cm^3 (predicted)
Electron configuration	[Rn]5f^{14}6d^{9}7s^2

ISOFLEX
Isotopes for Science, Medicine and Industry
1-415-440-4433 | USA & Canada Toll Free 1-888-399-4433 | Fax 1-415-563-4433
PO Box 29475 | San Francisco, CA 94129 USA | isoflex.com