

General Information

Discovery

The discovery of element 102 was disputed, but it was conclusively identified in 1958 by A. Ghiorso and co-workers in California, USA.

Appearance

Nobelium is a radioactive metal. Only a few atoms have ever been made, so its appearance and properties are unknown.

Source

Nobelium is made by the bombardment of curium with carbon nuclei.

Uses

Nobelium has no uses outside research.

Biological Role

Nobelium has no known biological role. It is toxic due to its radioactivity.

Physical Information

Atomic Number	102
Relative Atomic Mass ($^{12}\text{C}=12.000$)	259 (radioactive)
Melting Point/K	Not available
Boiling Point/K	Not available
Density/kg m ⁻³	Not available
Ground State Electron Configuration	[Rn]5f ¹⁴ 7s ²
Electron Affinity (M-M ⁻)/kJ mol ⁻¹	Not available

Key Isotopes

Nuclide	²⁵⁹ No
Atomic mass	
Natural abundance	0%
Half-life	58 mins

Ionisation Energies/kJ mol⁻¹

M - M ⁺	642
M ⁺ - M ²⁺	
M ²⁺ - M ³⁺	
M ³⁺ - M ⁴⁺	
M ⁴⁺ - M ⁵⁺	
M ⁵⁺ - M ⁶⁺	
M ⁶⁺ - M ⁷⁺	
M ⁷⁺ - M ⁸⁺	
M ⁸⁺ - M ⁹⁺	
M ⁹⁺ - M ¹⁰⁺	

Other Information

Enthalpy of Fusion/kJ mol⁻¹ Not available

Enthalpy of Vaporisation/kJ mol⁻¹ Not available

Oxidation States

Main No^{II}

Others No^{III}

Covalent Bonds/kJ mol⁻¹

Not applicable