

113
Nh
Nihonium
[286]

Key Properties

Atomic Mass	[286]
Category	unknown-properties
State at 20°C	solid
Melting Point	null
Boiling Point	null
Density	16*
Electron Config	[Rn] 5f146d107s27p1
Electronegativity	null
Year Discovered	2003
Discovered By	RIKEN

Did You Know?

- 1 It is the first chemical element to have been discovered in an Asian country.
- 2 It is named after the common Japanese name for Japan, 'Nihon', which literally means 'the Land of the Rising Sun'.
- 3 The discovery was made by a team of scientists at the RIKEN research institute in Japan.
- 4 Its most stable known isotope has a half-life of about 20 seconds.
- 5 It is in Group 13, below boron, aluminium, gallium, indium, and thallium.

APPEARANCE

Nihonium is a synthetic, highly radioactive element.

SUPERHERO PERSONA

"The Rising Sun, the first hero to be discovered in an Asian country."

EVERYDAY CONNECTION

Nihonium has no everyday connection, used only in research.

POP CULTURE

Nihonium's discovery was a major point of national pride for Japan.

Nihonium (Nh): The Superheavy Metal from Japan

Nihonium is a synthetic, highly radioactive metal. Only a few atoms have ever been created, and they vanish almost instantly. With an atomic number of 113, it belongs to the group of superheavy elements. Its name comes from Nihon—one of the Japanese words for Japan—in honor of the country where it was first made.

A Man-Made Element

Nihonium doesn't exist naturally. It can only be created in a laboratory using a heavy ion accelerator. The first successful experiment involved bombarding atoms of bismuth-209 with zinc-70 nuclei. When the two fused, they formed a single atom of a brand-new element—nihonium.

Biological Role & Uses

Because nihonium is so rare and unstable (its most stable isotope lasts less than a second before decaying), it has no practical uses beyond scientific research. Physicists study it to learn more about superheavy elements and to explore the limits of the periodic table. Nihonium has no role in living things and is considered toxic due to its intense radioactivity.

History of Discovery

The discovery of nihonium was a proud moment for Japanese science:

2004: A team led by Kosuke Morita at the RIKEN Nishina Center for Accelerator-Based Science in Japan first created and detected atoms of nihonium.

2015: The International Union of Pure and Applied Chemistry (IUPAC) confirmed the discovery.

2016: The element was officially named nihonium, making it the first element named after Japan.