

## Isotopes of Copernicium

Isotope	Atomic Mass	Half-life	Mode of Decay	Nuclear Spin	Nuclear Magnetic Moment
Cn-277	277	0.00024 seconds	$\alpha$ to Ds-273	No data available	No data available
Cn-283	283	3 minutes	SF	No data available	No data available
Cn-284	284	44.30 seconds	$\alpha$ to Ds-280	No data available	No data available
Cn-285	285	11 minutes	$\alpha$ to Ds-281	No data available	No data available



Copernicium is an extremely radioactive synthetic element that can only be created in a laboratory. It was discovered in 1996 at Gesellschaft für Schwerionenforschung (GSI) (Center for Heavy Ion Research) in Darmstadt, Germany, by a team of scientists led by Sigurd Hofmann. The new element was produced by fusing a zinc atom with a lead atom. Temporarily labeled "ununbium" (*un* meaning "one" and *bi* meaning "two," referring to the element's atomic number, 112), copernicium officially received its permanent name — proposed in honor of scientist and astronomer Nicolaus Copernicus — on February 19, 2010, the 537th anniversary of Copernicus' birth.

In total, approximately 75 atoms of copernicium have been detected using various nuclear reactions. It has no stable or naturally-occurring isotopes, although several radioactive isotopes have been synthesized in the laboratory, either by fusing two atoms or by observing the decay of heavier elements. During reactions with gold, it has been shown to be an extremely volatile metal. The isotope Copernicium-283 was instrumental in the confirmation of the discoveries of the elements flerovium and livermorium.

## Properties of Copernicium

<b>Name</b>	Copernicium
<b>Symbol</b>	Cn
<b>Atomic number</b>	112
<b>Atomic weight</b>	[285]
<b>Standard state</b>	Presumably a liquid at 298 °K
<b>CAS Registry ID</b>	54084-26-3
<b>Group in periodic table</b>	12
<b>Group name</b>	None
<b>Period in periodic table</b>	7
<b>Block in periodic table</b>	d-block
<b>Color</b>	Unknown, but probably metallic and silvery white or grey in appearance
<b>Classification</b>	Metallic
<b>Melting point</b>	No data available
<b>Boiling point</b>	No data available
<b>Density of solid</b>	16.80 g/cm <sup>3</sup> (predicted)
<b>Ground state electron configuration</b>	[Rn]5f <sup>14</sup> 6d <sup>10</sup> 7s <sup>2</sup> (predicted)