



Chemical and physical properties of Zinc Dust

How the element was discovered

Alloys containing zinc has been used by humanity since ancient times. The name of the [zinc dust](#) is encountered in the works of Paracelsus, a doctor who lived in the 16th century. At around the same time the metal began to be used by craftsmen in China, who forged coins from it. Later zinc was discovered in Europe, and the metal began to be widely used in various spheres.

Characteristics of the element

The electron configuration of the outer shell of the atom is $4s^2$. Its constant and only oxidation state are +2. In the periodic table, zinc, cadmium, copper, manganese, chromium and others are transition metals. They include elements in which electrons fill the outer and next-to-outer d and f subshells.

Metals of the platinum group are also transition metals – ruthenium, rhodium, platinum, osmium, palladium and iridium. They form complex compounds, in which they act with different coordination numbers as a complexing agent. These properties are also characteristic for zinc.

Physical properties of [zinc dust](#)

Characteristics of the element:

- Density – 7.13 g/cm^3
- Color – bluish-white
- Zinc is a low-melting metal, with a melting point of 420°C
- The elasticity and malleability of the metal increases when it is heated to 100°C
- The boiling point of the simple substance is 906°C ;
- When heated to 200°C , zinc loses its elasticity and turns to a gray powder
- The metal has a high heat capacity and heat conductivity
- Zinc is a good conductor.

Zinc Dust (Zn)

Material condensed from zinc vapor.

Chemical Name: Zinc

Chemical Formula: Zn

Typical Applications

Organic, inorganic

Thin film metal coatings

Lubricants, precipitating agent and a reducing agent.

Importance of [zinc powder](#)

What is [Zinc Dust](#)?

Zinc Dust is zinc stuff in the form of a powder. It is a bluish-white metal with an atomic number of 30 and is found in group 12 of the periodic table. It is a reactive metal and a very strong reducing agent.

Due to the reactive nature of Zinc,

It reacts with atmospheric carbon dioxide very quickly and makes a layer on the metal surface which prevents further reaction with air and water and makes the metal surface secure from rust.

Zinc is denoted by the symbol Zn. Zinc Dust is also known as [Zinc Powder](#).

Storage and Handling Zinc should be stored in a tightly sealed container at all times and kept away from substances with which it is incompatible.



