

# Molybdenum Powder A Tough Metal With Great Thermal Conductivity

There are a lot of things that make [molybdenum powder](#) unique and special on its own. Aside from the fact that it is one of the first metals discovered, the molybdenum powder is a discovery that additionally helped many industries to collide steel and different metals with this element and create amazing results.

Generally, the molybdenum powder is used to create alloys with other metals, usually two or more. The most known alloys of molybdenum powder, on the other hand, are the ones with steel – coming from the fact that it enhances steel's strength, corrosion and resistance to wear.

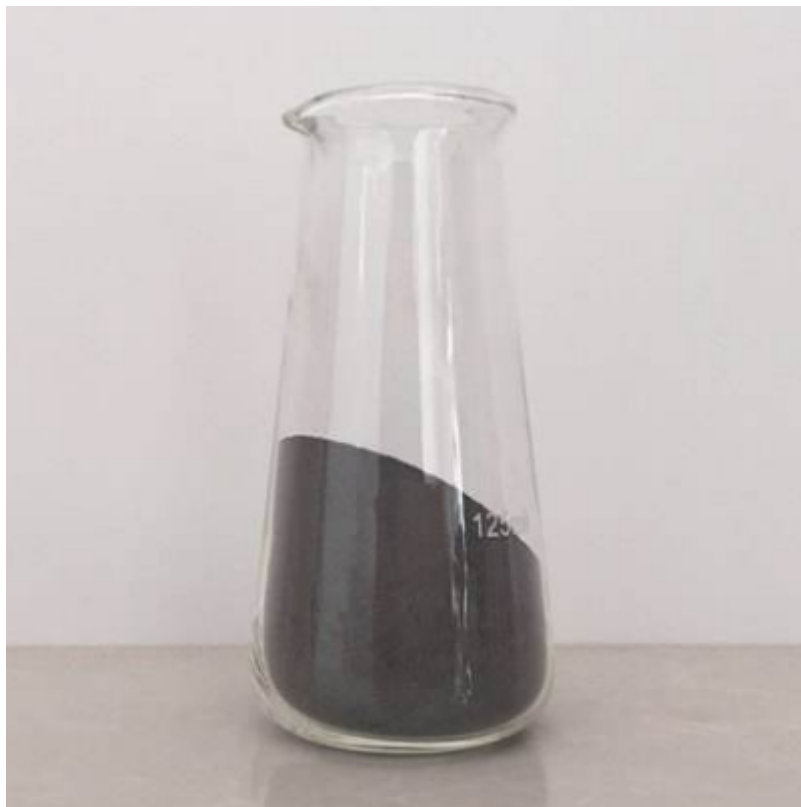
## **The Wide Uses Of Molybdenum Powder**

Molybdenum powder is basically roasted in order to be converted to oxide. This process is known as technical molybdic oxide and is one of the most common ways of adding molybdenum powder to steel and enhancing its strength.

Additionally, molybdenum can be used for processing where it produces an improved product that can be used as a lubricant. As you can see, the use of this powder is really wide and every scenario, it helps when paired with another metal. That is why many industries are dependent on it and why many companies are looking for a reliable [molybdenum powder supplier](#).

Not only industries – but the world depends on molybdenum. And

although this powder looks like any other gray-ish powder, it is used as a common addition to some of the most important elements in metallurgy including irons, steels and non-ferrous alloys.



As an important alloying component in all types of steels (tool steels, high-speed steels, structural steels etc.), molybdenum powder is very important. Aside from this use, the compounds of molybdenum are used in the chemical industry as lubricants and catalysts and electronic products, as well as numerous other applications.

## **The Main Features Of Molybdenum Powder**

Prepared from a high-purity powder created by the hydrogen reduction of ammonium molybdate and purified molybdic trioxide – molybdenum powder is melted above temperatures of 760 degrees in Celsius. It has a high melting point (2615 C) and

high density (10.2 g/cubic cm) as well as solid thermal and electrical conductivity, rigidity, hot strength and ductility at room temperatures.

From these features, it is clear that molybdenum powder can tolerate high temperatures and control its toughness under these conditions. Just because of these facts, this powder is used widely nowadays and at high temperatures up to 1000 C which are proven to be higher than many nickel-based and steel alloys.

When it comes to compounds, the high-purity molybdenum powder is used as a high-temperature lubricant in favor of petroleum based oils – or as a dry powdered fertilizer. Molybdenum-chromium, calcium molybdate, molyte and molybdate oxide are all used as sources of molybdenum in the steel industry.

## **The Health Effects Of Molybdenum**

Aside from the widespread use, molybdenum powder has no evidence of being toxic according to many reports. In fact, it is a necessary trace metal for the growth of plants and plays an important role in today's environment. That is why molybdenum powder is considered as important and very special powder in today's society.

*In the end, finding a trusted molybdenum powder supplier is one of the primary things for many companies and numerous industries. At [TTT Metal Powder](#), we take pride in offering the finest molybdenum powder and work with businesses of all sizes and needs.*

*You can purchase molybdenum powder today and start using it in your applications.*