



#### Characteristics

- Paramagnetic at room temperature
- Physical properties like hardness
- Volatile elements
- Ductile and malleable
- Good conductivity
- Magnetic properties

# Quick Facts

Molecular Formula Sm Molecular Weight 150.36g/mol 7.35g/cm3 Density Melting Point 1072°C **Boiling Point** 1803°C Thermal Conductivity 0.165W/(mK) **Electrical Resistivity** 88.0 nΩm (at 20 °C) Thermal Expansion 12.7µm/(mK) (at 25 °C) Young's Modulus 49.7GPa Specific Heat 0.043Cal/g/K @ 25 °C

Purity: 99.5%

## **High Purity Smarium**

Pieces | Rods | Shots | Chips |

Pellets | Wires | Ingots | Bars | Granules







ISO 9001:2015 CERTIFIED COMPANY

#### Samarium is a chemical element with the symbol Sm and atomic number 62. Samarium is a silvery-white metal belonging to the lanthanide group of the periodic table. It is relatively stable at room temperature in dry air, but it ignites when heated above 150 C and forms an oxide coating in moist air. It is one of the most volatile elements among the lanthanides. Samarium and its compounds are paramagnetic at room temperature.

### Benefits

- Crafting & metal working applications to exhibition displays
- Uses in the glass
- Ceramics and electronics industries
- Manufacture of permanent magnets
- Manufacture of solar-powered electric aircrafts
- Used in making special infrared absorbing glass and cores of carbon arc lamp electrodes.
- Used in making new permanent magnets



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