

# Holmium Powder

**Formula:** Ho

**Percentage Purity:** 99.9%

**Maximum Particle Size:** 500 $\mu$ m

**Weight:** 10g

**CAS Number:** 7440-60-0

**UOM Code:** 785-676-54

**SKU:** 1000118825-group

**Product Code:** HO00-PD-000110

## Material Properties for Metals

### Atomic Properties

Element	Value
Atomic number	67
Crystal structure	Hexagonal close packed
Electronic structure	Xe 4f <sup>11</sup> 6s <sup>2</sup>
Valences shown	3
Atomic weight( amu )	164.9304
Thermal neutron absorption cross-section( Barns )	65
Atomic radius - Goldschmidt( nm )	0.176
Ionisation potential( No./eV )	2/ 11.80
Ionisation potential( No./eV )	1/ 6.02

### Mechanical Properties

Element	Value
Material condition	Polycrystalline
Poisson's ratio	0.225
Bulk modulus( GPa )	40.5
Tensile modulus( GPa )	66.9
Hardness - Vickers( kgf mm <sup>2</sup> )	60
Tensile strength( MPa )	262
Yield strength( MPa )	221

## Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	94@20@20°C
Temperature coefficient( $\text{K}^{-1}$ )	0.00171@0-100°C

## Physical Properties

Element	Value
Boiling point( C )	2695
Density( $\text{gcm}^{-3}$ )	8.803@20°C

## Thermal Properties

Element	Value
Melting point( C )	1474
Latent heat of evaporation( $\text{J g}^{-1}$ )	1695
Latent heat of fusion( $\text{J g}^{-1}$ )	104
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	165@25°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	16.2@0-100°C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	9.5@0-400°C