

Zinc Disk

Formula: Zn

Percentage Purity: 99.99%

Temper: As Rolled

Thickness: 0.05mm

Diameter: 25mm

CAS Number: 7440-66-6

UOM Code: 002-556-64

SKU: 1000000374-group

Product Code: ZN00-FL-000135

Material Properties for Metals

Atomic Properties

| Element | Value |
|---|-------------------------------------|
| Atomic number | 30 |
| Crystal structure | Hexagonal close packed |
| Electronic structure | Ar 3d ¹⁰ 4s ² |
| Valences shown | 2 |
| Atomic weight(amu) | 65.38 |
| Thermal neutron absorption cross-section(Barns) | 1.1 |
| Photo-electric work function(eV) | 4.3 |
| Natural isotope distribution(Mass No./%) | 64/ 48.6 |
| Natural isotope distribution(Mass No./%) | 67/ 4.1 |
| Natural isotope distribution(Mass No./%) | 68/ 18.8 |
| Natural isotope distribution(Mass No./%) | 70/ 0.6 |
| Natural isotope distribution(Mass No./%) | 66/ 27.9 |
| Atomic radius - Goldschmidt(nm) | 0.137 |
| Ionisation potential(No./eV) | 6/ 108 |
| Ionisation potential(No./eV) | 1/ 9.39 |
| Ionisation potential(No./eV) | 4/ 59.4 |
| Ionisation potential(No./eV) | 3/ 39.7 |
| Ionisation potential(No./eV) | 2/ 17.96 |
| Ionisation potential(No./eV) | 5/ 82.6 |

Mechanical Properties

| Element | Value |
|------------------------|-----------------|
| Hardness - Mohs | 2.5 |
| Material condition | Polycrystalline |
| Poisson's ratio | 0.249 |
| Bulk modulus(GPa) | 69.4 |
| Tensile modulus(GPa) | 104.5 |

Electrical Properties

| Element | Value |
|---|----------------|
| Electrical resistivity(μOhmcm) | 5.96@20@20°C |
| Superconductivity critical temperature(K) | 0.85 |
| Temperature coefficient(K^{-1}) | 0.0042@0-100°C |
| Thermal emf against Pt (cold 0C - hot 100C)(mV) | 0.76 |

Physical Properties

| Element | Value |
|------------------------------|-----------|
| Boiling point(C) | 907 |
| Density(gcm^{-3}) | 7.14@20°C |

Thermal Properties

| Element | Value |
|--|-------------|
| Melting point(C) | 419.5 |
| Latent heat of evaporation(J g^{-1}) | 1748 |
| Latent heat of fusion(J g^{-1}) | 111 |
| Specific heat($\text{J K}^{-1} \text{kg}^{-1}$) | 388@25°C |
| Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$) | 116@0-100°C |
| Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$) | 31@0-100°C |