

Rhodium Sputtering Target

Formula: Rh

Percentage Purity: 99.9%

Thickness: 1mm

Diameter: 25mm

CAS Number: 7440-16-6

UOM Code: 475-433-51

SKU: 1000179764-group

Product Code: RH00-ST-000100

Material Properties for Precious Metals

Atomic Properties

| Element | Value |
|---|------------------------------------|
| Atomic number | 45 |
| Crystal structure | Face centred cubic |
| Electronic structure | Kr 4d ⁷ 5s ¹ |
| Valences shown | 2,3,4,5,6 |
| Atomic weight(amu) | 102.9055 |
| Thermal neutron absorption cross-section(Barns) | 150 |
| Photo-electric work function(eV) | 4.6 |
| Atomic radius - Goldschmidt(nm) | 0.134 |
| Ionisation potential(No./eV) | 1/ 7.46 |
| Ionisation potential(No./eV) | 3/ 31.1 |
| Ionisation potential(No./eV) | 2/ 18.1 |

Mechanical Properties

| Element | Value |
|------------------------|-------|
| Material condition | Hard |
| Material condition | Soft |
| Poisson's ratio | 0.26 |
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| Bulk modulus(GPa) | 276 |
| Bulk modulus(GPa) | 276 |
| Tensile modulus(GPa) | 379 |

| Element | Value |
|---|--------------|
| Tensile modulus(GPa) | 379 |
| Hardness - Vickers(kgf mm ²) | 300 |
| Hardness - Vickers(kgf mm ²) | 120 |
| Tensile strength(MPa) | 1380-2070 |
| Tensile strength(MPa) | 690-760 |
| Yield strength(MPa) | 69-275 |

Electrical Properties

| Element | Value |
|---|----------------|
| Electrical resistivity(μOhmcm) | 4.7@20@20°C |
| Temperature coefficient(K ⁻¹) | 0.0044@0-100°C |
| Thermal emf against Pt (cold 0C - hot 100C)(mV) | 0.7 |

Physical Properties

| Element | Value |
|-----------------------------|--------------|
| Boiling point(C) | 3727 |
| Density(gcm ³) | 12.4@20°C |

Thermal Properties

| Element | Value |
|--|--------------|
| Melting point(C) | 1965 |
| Latent heat of evaporation(J g ⁻¹) | 4800 |
| Latent heat of fusion(J g ⁻¹) | 210 |
| Specific heat(J K ⁻¹ kg ⁻¹) | 244@25°C |
| Thermal conductivity(W m ⁻¹ K ⁻¹) | 150@0-100°C |
| Coefficient of thermal expansion($\times 10^{-6}$ K ⁻¹) | 8.5@0-100°C |