

Lanthanum Foil

Formula: La

Percentage Purity: 99%

Temper: As Rolled

Thickness: 0.1mm

Length 1: 25mm

Length 2: 25mm

CAS Number: 7439-91-0

UOM Code: 091-657-86

SKU: 1000012975-group

Product Code: LA00-FL-000110

Material Properties for Metals

Atomic Properties

| Element | Value |
|---|---|
| Atomic number | 57 |
| Crystal structure | Hexagonal close packed/Face centred cubic |
| Electronic structure | Xe 5d ¹ 6s ² |
| Valences shown | 3 |
| Atomic weight(amu) | 138.9055 |
| Thermal neutron absorption cross-section(Barns) | 8.9 |
| Photo-electric work function(eV) | 3.5 |
| Natural isotope distribution(Mass No./%) | 139/ 99.91 |
| Natural isotope distribution(Mass No./%) | 138/ 0.09 |
| Atomic radius - Goldschmidt(nm) | 0.187 |
| Ionisation potential(No./eV) | 3/ 19.18 |
| Ionisation potential(No./eV) | 1/ 5.58 |
| Ionisation potential(No./eV) | 2/ 11.06 |

Mechanical Properties

| Element | Value |
|---------------------|-----------------|
| Material condition | Polycrystalline |
| Poisson's ratio | 0.28 |
| Bulk modulus(GPa) | 24.8 |

| Element | Value |
|---|--------------|
| Tensile modulus(GPa) | 37.9 |
| Hardness - Vickers(kgf mm ²) | 40 |
| Tensile strength(MPa) | 131 |
| Yield strength(MPa) | 124 |

Electrical Properties

| Element | Value |
|---|-----------------|
| Electrical resistivity(μOhmcm) | 57@20@20°C |
| Superconductivity critical temperature(K) | 4.88 |
| Temperature coefficient(K ⁻¹) | 0.00218@0-100°C |

Physical Properties

| Element | Value |
|-----------------------------|--------------|
| Boiling point(C) | 3457 |
| Density(gcm ³) | 6.174@20°C |

Thermal Properties

| Element | Value |
|--|--------------|
| Melting point(C) | 921 |
| Latent heat of evaporation(J g ⁻¹) | 2897 |
| Latent heat of fusion(J g ⁻¹) | 60.2 |
| Specific heat(J K ⁻¹ kg ⁻¹) | 197@25°C |
| Thermal conductivity(W m ⁻¹ K ⁻¹) | 13.4@0-100°C |
| Coefficient of thermal expansion($\times 10^{-6}$ K ⁻¹) | 4.9@0-100°C |