Boron Granules

Formula: B
Percentage Purity: 99%
Nominal Granule Size: 15mm
Weight: 100g
Type: Injection Moulding
CAS Number: 7440-42-8
UOM Code: 537-716-10
SKU: 1000034872-group
Product Code: B-00-GL-000100

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	5
Crystal structure	Tetragonal
Electronic structure	He $2s^2$ $2p^1$
Valences shown	3
Atomic weight(amu)	10.81
Thermal neutron absorption cross-section(Barns)	672
Photo-electric work function(eV)	4.5
Natural isotope distribution(Mass No./%)	11/ 80.2
Natural isotope distribution(Mass No./%)	10/ 19.8
Atomic radius - Goldschmidt(nm)	0.097
Ionisation potential(No./eV)	4/ 259
Ionisation potential(No./eV)	2/ 25.2
Ionisation potential(No./eV)	1/ 8.30
Ionisation potential(No./eV)	5/ 340
Ionisation potential(No./eV)	337.9

Mechanical Properties

Element	Value
Hardness - Mohs	9.5
Material condition	Arc melted

Element	Value
Tensile modulus(GPa)	441
Tensile strength(MPa)	1580-2410

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	$1.8x10^{12}$@27@27°C

Physical Properties

Element	Value
Boiling point(C)	3700
Density(gcm?³)	2.34-2.37@20°C

Thermal Properties

Element	Value
Melting point(C)	2180
Latent heat of evaporation(J g?¹)	35000
Latent heat of fusion(J g?¹)	2090
Specific heat(J K?¹ kg?¹)	1030@25°C
Coefficient of thermal expansion(x10?? K?¹)	8.3@0-100°C