

Potassium Pellets

Formula: K

Percentage Purity: 99.97%

Maximum Lump Size: 25mm

Weight: 5g

CAS Number: 7440-09-7

UOM Code: 073-771-49

SKU: 1000010434-group

Product Code: K-00-LP-000100

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	19
Crystal structure	Body centred cubic
Electronic structure	Ar 4s ¹
Valences shown	1
Atomic weight(amu)	39.0983
Thermal neutron absorption cross-section(Barns)	1.8
Photo-electric work function(eV)	2.2
Natural isotope distribution(Mass No./%)	40/ 0.01
Natural isotope distribution(Mass No./%)	39/ 93.26
Natural isotope distribution(Mass No./%)	41/ 6.73
Atomic radius - Goldschmidt(nm)	0.238
Ionisation potential(No./eV)	2/ 31.6
Ionisation potential(No./eV)	4/ 60.9
Ionisation potential(No./eV)	1/ 4.34
Ionisation potential(No./eV)	5/ 82.7
Ionisation potential(No./eV)	3/ 45.7
Ionisation potential(No./eV)	6/ 100

Mechanical Properties

Element	Value
Hardness - Mohs	0.5

Element	Value
Material condition	Polycrystalline @ -190C
Poisson's ratio	0.35
Bulk modulus(GPa)	3.1
Tensile modulus(GPa)	3.53

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	6.8@20@20°C
Temperature coefficient(K^{-1})	0.0057@0-100°C

Physical Properties

Element	Value
Boiling point(C)	760
Density(gcm^{-3})	0.86@20°C

Thermal Properties

Element	Value
Melting point(C)	63.25
Latent heat of evaporation(J g^{-1})	2033
Latent heat of fusion(J g^{-1})	61
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	753@25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	102.5@0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	83@0-100°C