

Tellurium Powder

Formula: Te

Percentage Purity: 99.5%

Maximum Particle Size: 75µm

Weight: 1000g

CAS Number: 13494-80-9

UOM Code: 420-619-68

SKU: 1000167930-group

Product Code: TE00-PD-000110

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	52
Crystal structure	Hexagonal
Electronic structure	Kr 4d ¹⁰ 5s ² 5p ⁴
Valences shown	2,4,6
Atomic weight(amu)	127.6
Thermal neutron absorption cross-section(Barns)	4.7
Photo-electric work function(eV)	4.8
Natural isotope distribution(Mass No./%)	124/ 4.6
Natural isotope distribution(Mass No./%)	125/ 7.0
Natural isotope distribution(Mass No./%)	123/ 0.9
Natural isotope distribution(Mass No./%)	126/ 18.7
Natural isotope distribution(Mass No./%)	120/ 0.1
Natural isotope distribution(Mass No./%)	128/ 31.7
Natural isotope distribution(Mass No./%)	122/ 2.5
Natural isotope distribution(Mass No./%)	130/ 34.5
Atomic radius - Goldschmidt(nm)	0.143
Ionisation potential(No./eV)	3/ 28.0
Ionisation potential(No./eV)	4/ 37.4
Ionisation potential(No./eV)	1/ 9.01
Ionisation potential(No./eV)	6/ 70.7
Ionisation potential(No./eV)	5/ 58.8

Element	Value
Ionisation potential(No./eV)	2/ 18.6

Mechanical Properties

Element	Value
Hardness - Mohs	2.3
Material condition	Polycrystalline
Poisson's ratio	0.16-0.3
Bulk modulus(GPa)	31.4
Tensile modulus(GPa)	47.1

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	1.6×10^{-7} @ 0@0°C

Physical Properties

Element	Value
Boiling point(C)	990
Density(gcm^{-3})	6.25 @ 20°C

Thermal Properties

Element	Value
Melting point(C)	450
Latent heat of evaporation(J g^{-1})	820
Latent heat of fusion(J g^{-1})	138
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	201 @ 25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	3.3 @ 0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	16.75 @ 0-100°C