Tellurium Sputtering Target

Formula: Te
Thickness: 3mm
Diameter: 50mm
CAS Number: 13494-80-9
UOM Code: 361-681-27
SKU: 1000150091-group
Product Code: TE00-ST-000100

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	52
Crystal structure	Hexagonal
Electronic structure	Kr $4d^{1}$? $5s^{2}$ 5p?
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
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)	1.6x10?@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(J K?¹ kg?¹)	201@25°C
Thermal conductivity(W m?¹ K?¹)	3.3@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	16.75@0-100°C