Flexible Graphite Carbon Foil/Sheet - T 0.075mm 10mm x 10mm

Grade: Flexible Graphite
Formula: C
Percentage Purity: 99.8%
Thickness: 0.075mm
Length 1: 10mm
Length 2: 10mm
CAS Number: 7440-44-0
UOM Code: 710-697-51
Legacy Code: C 000205
Distributor Code: GF71069751
SKU: 1000036844
Product Code: C-00-FL-000105

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	6
Crystal structure	Hexagonal/Diamond
Electronic structure	He $2s^2$ $2p^2$
Valences shown	2, 3, 4
Atomic weight(amu)	12.011
Thermal neutron absorption cross-section(Barns)	0.0034
Photo-electric work function(eV)	4.8
Natural isotope distribution(Mass No./%)	12/ 98.89
Natural isotope distribution(Mass No./%)	13/ 1.11
Atomic radius - Goldschmidt(nm)	0.077
Ionisation potential(No./eV)	6/ 490
Ionisation potential(No./eV)	4/ 64.5
Ionisation potential(No./eV)	1/ 11.26
Ionisation potential(No./eV)	3/ 47.9
Ionisation potential(No./eV)	2/ 24.38
Ionisation potential(No./eV)	5/ 392

Mechanical Properties

Element	Value
Hardness - Mohs	0.5-1
Hardness - Mohs	10
Material condition	Diamond
Material condition	Graphite
Bulk modulus(GPa)	33
Bulk modulus(GPa)	542
Tensile modulus(GPa)	4.8

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	1375@0°C
Thermal emf against Pt (cold 0C - hot 100C)(mV)	0.7

Physical Properties

Element	Value
Boiling point(C)	5000
Density(gcm?³)	2.25@20°C

Thermal Properties

Element	Value
Melting point(C)	3650
Specific heat(J K?¹ kg?¹)	712@25°C
Thermal conductivity(W m?¹ K?¹)	80-240@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	0.6-4.3@0-100°C