Aluminium Foil/Sheet - T 0.005mm 10mm x 10mm

Formula: Al
Percentage Purity: 99%
Thickness: 0.005mm
Length 1: 10mm
Length 2: 10mm
CAS Number: 7429-90-5
UOM Code: 372-111-82
Legacy Code: A 000215
Distributor Code: GF37211182
SKU: 1000000009
Product Code: A-00-FL-000114

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	13
Crystal structure	Face centred cubic
Electronic structure	Ne $3s^2$ $3p^1$
Valences shown	3
Atomic weight(amu)	26.98154
Thermal neutron absorption cross-section(Barns)	0.232
Photo-electric work function(eV)	4.2
Atomic radius - Goldschmidt(nm)	0.143
Ionisation potential(No./eV)	6/ 190
Ionisation potential(No./eV)	2/ 18.8
Ionisation potential(No./eV)	1/ 5.99
Ionisation potential(No./eV)	3/ 28.4
Ionisation potential(No./eV)	5/ 154
Ionisation potential(No./eV)	4/ 120

Mechanical Properties

Element	Value
Material condition	Soft

Element	Value
Material condition	Hard
Poisson's ratio	0.345
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Bulk modulus(GPa)	75.2
Bulk modulus(GPa)	75.2
Tensile modulus(GPa)	70.6
Tensile modulus(GPa)	70.6
Hardness - Vickers(kgf mm?²)	21
Hardness - Vickers(kgf mm?²)	35-48
Tensile strength(MPa)	50-90
Tensile strength(MPa)	130-195
Yield strength(MPa)	Oct-35
Yield strength(MPa)	110-170

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	2.67@20°C
Superconductivity critical temperature(K)	1.175
Temperature coefficient(K?¹)	0.0045@0-100°C
Thermal emf against Pt (cold 0C - hot 100C)(mV)	0.42

Physical Properties

Element	Value
Boiling point(C)	2467
Density(gcm?³)	2.7@20°C

Thermal Properties

Element	Value
Melting point(C)	660.4
Latent heat of evaporation(J g?¹)	10800
Latent heat of fusion(J g?¹)	388
Specific heat(J K?¹ kg?¹)	900@25°C
Thermal conductivity(W m?¹ K?¹)	237@0-100°C
Coefficient of thermal expansion(x10?? K?¹)	23.5@0-100°C