

Scandium Pellets

Formula: Sc

Percentage Purity: 96%

Maximum Lump Size: 25mm

Weight: 50g

CAS Number: 7440-20-2

UOM Code: 224-510-66

SKU: 1000093653-group

Product Code: SC00-LP-000100

Material Properties for Metals

Atomic Properties

Element	Value
Atomic number	21
Crystal structure	Hexagonal close packed
Electronic structure	Ar 3d ¹ 4s ²
Valences shown	3
Atomic weight(amu)	44.9559
Thermal neutron absorption cross-section(Barns)	25
Photo-electric work function(eV)	3.5
Atomic radius - Goldschmidt(nm)	0.16
Ionisation potential(No./eV)	3/ 24.8
Ionisation potential(No./eV)	5/ 91.7
Ionisation potential(No./eV)	4/ 73.5
Ionisation potential(No./eV)	6/ 111
Ionisation potential(No./eV)	1/ 6.54
Ionisation potential(No./eV)	2/ 12.8

Mechanical Properties

Element	Value
Hardness - Brinell	78
Hardness - Brinell	136
Material condition	Soft
Material condition	Hard

Element	Value
Poisson's ratio	0.27
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Bulk modulus(GPa)	44.2
Bulk modulus(GPa)	44.2
Tensile modulus(GPa)	79.3
Tensile modulus(GPa)	79.3

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	66@20@20°C
Temperature coefficient(K^{-1})	0.00282@0-100°C

Physical Properties

Element	Value
Boiling point(C)	2831
Density(gcm^{-3})	2.99@20°C

Thermal Properties

Element	Value
Melting point(C)	1541
Latent heat of evaporation(J g^{-1})	7293
Latent heat of fusion(J g^{-1})	357
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	557@25°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	15.8@0-100°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	12@0-100°C