Superwool® Blankets

Datasheet Code US: 1114-105

SDS Code US: 350

Features

- Low Bio-Persistence
- Excellent Thermal Insulating Performance
- Very Low Linear Shrinkage
- Low Heat Storage Capacity
- Excellent Thermal Shock Resistance
- No Organic Binders

Product Description

Superwool is manufactured from pure raw materials and processed to offer excellent performance in high-temperature applications. Superwool offers an alternative to traditional insulating solutions due to its high refractoriness and excellent non-wetting characteristics with molten aluminum.

Superwool provides stability and resistance to chemical attack. Exceptions include hydrofluoric acid, phosphoric acid and strong alkalis (i.e. NaOH, KOH). Superwool is unaffected by incidental spills of oil or water. Thermal and physical properties are restored after drying.

Superwool is ideally suited to many applications and is available in a wide range of thicknesses and densities. The maximum continuous use temperature depends on the application. Refer to your local Thermal Ceramics sales representative for advice.

Applications

- Furnace Linings
- Kiln Linings
- Boiler Insulation
- Furnace Door Seals
- Expansion Joints
- Pipe Wrap Insulation
- Investment Casting Mould Wrap
- Heat Shields
- Field Stress Relieving
- Removable Thermal Insulation Pads
- Steam and Gas Turbine Insulation
- Passive Fire Protection
- Acoustical Insulation

Type

Alkaline Earth Silicate (AES) Wool
CAS number: 329211-92-9

Superwool® Blankets

Physical Properties	Superwool Plus	Superwool HT
Color	white	white
Continuous Use Temperature, °F (°C)	1832 (1000)	2102 (1150)
Classification Temperature, °F (°C)	2192 (1200)	2372 (1300)

Chemical Analysis, %, Weight Basis After Firing		
Silica, SiO_2	62 - 68	70 - 80
Lime + Magnesia, CaO + MgO	29 - 39	18 - 25
Other	<1	<3
Leachable Chlorides	trace	-

Thermal Conductivity, BTU·in/hr·ft²·°F (W/m·K), per ASTM C201		
8 lb/ft³ (128 kg/m³) Nominal Density		
@ 500°F (260°C)	0.39 (0.06)	0.41 (0.06)
@ 1000°F (538°C)	0.73 (0.11)	0.85 (0.12)
@ 1500°F (816°C)	1.28 (0.18)	1.57 (0.23)
@ 1800°F (982°C)	1.73 (0.25)	-
@ 2000°F (1093°C)	-	2.54 (0.37)

Availability and Packaging

Superwool Blankets are packaged in cartons and stretch-wrapped onto pallets. Some size and density combination may require a minimum order. Please check with your Thermal Ceramics office for current lead times and availability.

Thickness, inch (mm)	Density, lb/ft³ (kg/m³)				Length, inch (mm)	Width, inch (mm)	ft² (m²)/carton for 24 inch (610mm) width rolls
	4 (64)	6 (96)	8 (128)	10 (160)			
¼ (6)			X		240 (6095)	24, 48 (610, 1220)	160 (14.9)
½ (13)		X	X	X	600 (15240)		100 (9.3)
1 (25)	X	X	X	X	300 (7620)		50 (4.6)
1 ½ (38)	X	X	X		180 (4575)		30 (2.8)
2 (50)	X	X	X		150 (3810)		25 (2.3)