Denka® Alcen® Blankets

Datasheet Code US: 5-14-265   SDS: 209

Product Description

Denka Alcen Blankets are made from high alumina fibers using the sol-gel process. They are doubled needled for exceptional strength and flexibility for use in applications up to 2912°F (1600°C) in oxidizing, reducing and chemically aggressing atmospheres.

Features

- Low linear shrinkage up to 2912°F (1600°C)
- Low thermal conductivity
- Excellent resistance to Alkali and chemical attack
- Excellent compression resistance and resiliency

Applications

- Reheat Furnace Linings
- Galvanizing Furnace Linings
- Reducing Atmosphere Furnace Linings
- Aluminum Furnaces
- High Firing Ceramics Kiln Linings

Type

Polycrystalline Wool (PCW)

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Blanket Product Name	Denka Alcen NBK80	Denka Alcen NBK95
Fiber Class	PCW	PCW
Physical Properties		
Color	white	white
Classification Temperature, °F	2912	2912
Classification Temperature, °C	1600	1600
Melting Temperature, °F	3632	3632
Melting Temperature, °C	2000	2000
Density, pcf	6, 8	6
Denisty, kg/m^3	96, 128	96
Fiber diameter, µm	3-5	3-5
Linear shrinkage, %		
After 24 hrs, isothermal heating @ 2500°F (1371°C)	<1	-
After 24 hrs, isothermal heating @ 2912°F (1600°C)	1.5	-
Chemical Analysis, % weight basis after firing		
Alumina, Al_2O_3	80	95
Silica, SiO_2	20	5
Other	trace	trace
Thermal Conductivity, BTU•in/hr•ft^2, per ASTM C201		
Density, pcf	6	6
500°F	0.38	-
1000°F	0.74	-
1500°F	1.3	-
2000°F	2.07	-
2500°F	3.04	-
Thermal Conductivity, W/m•K, per ASTM C201		
Density, kg/m^3	96	96
260°C	0.05	-
538°C	0.11	-
816°C	0.19	-
1093°C	0.3	-
1371°C	0.44	-