

Product Overview :

The ceramic fiber blanket is a lightweight, yet durable, thermal insulation product made from interwoven ceramic fibers. Engineered for high-temperature environments, it offers superior thermal resistance, withstanding temperatures up to 1425°C. Its low thermal conductivity and excellent thermal shock resistance make it ideal for industrial applications such as furnace linings, kiln insulation, and boiler seals. The blanket's flexible structure and high tensile strength ensure easy installation and long-lasting performance across various demanding environments



Key Points :

Exceptional Thermal Insulation: Our ceramic fiber blankets excel at providing outstanding insulation, effectively minimizing heat loss even in extreme temperatures.

Lightweight and Flexible: Designed for ease of use, these blankets are not only lightweight but also flexible, simplifying installation in a variety of settings.

High-Temperature Stability: These blankets maintain their structural integrity across a wide temperature range, ensuring consistent performance over time.

Chemical Resistance: Highly resistant to most chemicals and corrosive agents, making them suitable for harsh industrial environments.

Applications:

Furnace Insulation: Ideal for lining and insulating furnaces, kilns, and other high-temperature processing equipment.

Petrochemical Industry: Used in refining, power generation, and chemical processing applications where reliable thermal insulation is essential.

Fire Protection: Provides effective fireproofing in buildings, industrial facilities, and other structures.

Boiler Insulation: Suitable for use in boiler walls, doors, and seals to enhance energy efficiency.



Advantages:

Energy Efficient: Reduces heat loss, leading to significant energy savings.

Durability: Withstand mechanical stress and abrasion, extending the lifespan of the insulation system.

Eco-Friendly: Asbestos-free and made from environmentally safe materials.

- Good sound absorption
- Resistance to thermal shock & chemical attack
- High heat reflectance
- Low shrinkage
- High tensile strength & resiliency
- Unlimited shelf life

TECHNICAL SPECIFICATIONS :

<i>Chemical Analysis</i>	<i>1260°C</i>
Al ₂ O ₃ (%)	42 - 47
SiO ₂ (%)	53 - 58
ZrO ₂ (%)	-
Fe ₂ O ₃ (%)	< 0.1
TiO ₂ (%)	<0.3
Leachable Chlorides, ppm	< 10

<i>Physical Properties</i>	
Color	White
Classification Temperature (°C)	1260
Melting Point (°C)	1760
Thickness (25mm)	+8, -3
Width (610mm)	+10, -5
Length (7300mm)	+100, -0
Mean Fiber Dia (M)	2.6 to 3.4
Fiber Index (%)	48 min
Specific Gravity	2.65

<i>Linear Shrinkage (%) For 24 Hrs</i>	
1200°C	3.0 Max
1260°C	3.5 Max

<i>Density (kg/m³)</i>	<i>64</i>	<i>96</i>	<i>128</i>	<i>160</i>
<i>Thermal Conductivity , ASTM C-177 (W/mK)</i>				
200°C	0.057	0.056	0.052	0.058
400°C	0.09	0.09	0.08	0.08
600°C	0.18	0.14	0.12	0.11
800°C	0.27	0.22	0.18	0.16
1000°C	0.42	0.36	0.28	0.21

<i>Longitudinal Tensile Strength PSI (Min)</i>				
PSI (min)	3	6	11	14
kPa	21	42	75	96

Classification temperature refers to the maximum short term temperature limit. The maximum continuous use limit depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact us at email or office.

Tolerances as per ASTM C-892 (2010) or IS 15402 (2003) Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications continuous use temperature limits may be significantly reduced.

TECHNICAL SPECIFICATIONS :

<i>Chemical Analysis</i>	<i>1425°C</i>
Al ₂ O ₃ (%)	30 - 34
SiO ₂ (%)	50 - 54
ZrO ₂ (%)	14 - 18
Fe ₂ O ₃ (%)	< 0.1
TiO ₂ (%)	<0.3
Leachable Chlorides, ppm	< 10

<i>Physical Properties</i>	
Color	White
Classification Temperature (°C)	1425
Melting Point (°C)	1760
Thickness (25mm)	+8, -3
Width (610mm)	+10, -5
Length (7300mm)	+100, -0
Mean Fiber Dia (M)	2.6 to 3.4
Fiber Index (%)	48 min
Specific Gravity	2.65

<i>Linear Shrinkage (%) For 24 Hrs</i>	
1200°C	2.0 Max
1400°C	3.3 Max

<i>Density (kg/m³)</i>	<i>96</i>	<i>128</i>	<i>160</i>
<i>Thermal Conductivity , ASTM C-177 (W/mK)</i>			
200°C	0.098	0.074	0.068
400°C	0.13	0.10	0.10
600°C	0.14	0.12	0.11
800°C	0.24	0.19	0.18
1000°C	0.34	0.27	0.25

<i>Longitudinal Tensile Strength PSI (Min)</i>			
PSI (min)	6	11	14
kPa	42	74	96

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AVAILABILITY :

Thickness (mm)	Density (kg/m ³)				Roll Length (m)
	64	96	128	160	
6			✓	✓	7.30
12	✓	✓	✓	✓	7.30
19	✓	✓	✓	✓	7.30
25	✓	✓	✓	✓	7.30
38	✓	✓	✓		4.88
50	✓	✓	✓		3.65

Other Thicknesses / Sizes May Be Available On Request Subject To Minimum Order Requirement.

HANDLING INFORMATION

A Material Safety Data Sheet Has Been Issued Describing The Health, Safety And Environmental Properties Of This Product, Identifying The Potential Hazards And Giving Advice On Handling Precautions And Emergency Procedures. This Must Be Consulted And Fully Understood Before Handling, Storage Or Use.

Supplied by :

All data represents typical result of standard tests conducted under controlled condition. As Such, the information is intended only as a general guide for specifications and design estimates.

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