

## Product Overview :

Ceramic fiber bulk is a versatile insulation material composed of high-purity aluminosilicate fibers. Produced through a fiberization process, this material provides exceptional thermal resistance, making it ideal for a wide range of high-temperature applications. Ceramic fiber bulk is commonly used as a raw material for the production of other ceramic fiber products like blankets, boards, and paper. Its lightweight nature, combined with low thermal conductivity and excellent resistance to thermal shock, makes it a crucial component in industries requiring efficient heat management.



## Key Points :

**Customizable Insulation:** Due to its loose and fluffy nature, ceramic fiber bulk can be easily packed or layered to provide precise thermal insulation, conforming to complex geometries.

**Excellent Acoustic Dampening:** Beyond thermal insulation, ceramic fiber bulk effectively reduces sound transmission, making it suitable for environments requiring both thermal and acoustic control.

**Non-Combustible:** Offers superior fire resistance, making it a safe choice for high-risk areas where fire safety is a concern.

**Versatile Application:** Ideal for filling expansion joints, insulating around pipes, or as a loose fill in high-temperature areas where traditional rigid insulations are not suitable.



## Applications:

**Furnace Expansion Joints:** Used to fill and insulate gaps in expansion joints, accommodating thermal expansion while preventing heat loss.

**Pipe Insulation:** Suitable for insulating around complex piping systems, especially in high-temperature environments where traditional insulation is difficult to apply.

**Flexible Moldable Insulation:** Can be used to form flexible, moldable insulation pads or wraps for components that experience temperature fluctuations.



## Advantages:

**Highly Flexible:** Unlike rigid insulation materials, ceramic fiber bulk can be easily shaped and packed into irregular spaces, providing tailored insulation solutions.

**Cost-Effective:** Offers a cost-efficient solution for filling large spaces or gaps where precision insulation is required.

**Lightweight:** Easy to handle and apply, reducing labor costs and installation time.

**Non-Toxic and Environmentally Safe:** Free from asbestos and other harmful substances, ensuring a safe working environment and compliance with environmental regulations.

## Technical Specifications:

**Temperature :** 1260°C(2300°F) and 1425°C(2597°F)

## TECHNICAL SPECIFICATIONS :

Chemical Analysis	ACCEPTION CRITERIA	
	1200°C	1425°C
Al <sub>2</sub> O <sub>3</sub> (%)	42 - 46	30 - 34
SiO <sub>2</sub> (%)	54 - 58	50 - 54
ZrO <sub>2</sub> (%)	-	14 - 18
Fe <sub>2</sub> O <sub>3</sub> (%)	< 0.1	< 0.1
Parameters	ACCEPTION CRITERIA	
	1200°C	1425°C
Melting Point	1760°C	+8, -3
Colour	White	White
Fiber Diameter	2 - 4	2 - 4
Fiber Index (%)	48 - 54	48 - 52
Non Fibrous Content By Wt. (%)	12 - 17	10 - 15
Specific Gravity	2.65	2.65