

**Cerablanket®**  
**Cerachem® Blanket**  
**Cerachrome® Blanket**



**Material Type:** Refractory fiber blankets

**Classification Temperature**

Cerablanket® : 1260°C  
Cerachem® Blanket : 1425°C  
Cerachrome® Blanket : 1425°C

**Description**

All three grades of blankets have the same excellent chemical stability compared with their raw materials: Cerafiber®, Cerachem® Fiber and Cerachrome® Fiber spun bulk.

They have excellent strength before and after heating. They have superior acoustic as well as thermal insulation characteristics.

The wide range of available densities and thicknesses allow for the most effective deployment of the superior thermal characteristics in a wide variety of applications.

**Maximum Use Temperature**

The maximum use temperature depends on the application. Refer to our company for advice.

**Features**

- Excellent insulating performance.
- Unaffected by most chemicals except hydrofluoric and phosphoric acids and strong alkalis.
- Excellent thermal stability: fibers have good resistance to devitrification.
- For some applications, it is possible to use Cerachrome Blanket above its classification temperature (shrinkage is 5% at 1500°C).
- Low heat storage.
- The combination of long spun fibres and the needling operation produce tough, resilient and strong blankets, which resist tearing both before and after heating.
- Resistance to thermal shock.
- Good sound absorption.

**Applications**

- Furnace and kiln linings.
- Boiler insulations.
- Heat treatment temperature control.
- Glass furnace crown insulation.
- Furnace door seals.
- Duct linings.
- Pipe insulations.
- Thermal barriers for the automotive industry.
- Fire protection.
- Die-cut shapes for domestic appliances.
- Insulation for field stress relieving of welds.
- High temperature filter media.
- Nuclear insulation applications.
- Steam and gas turbines insulation.

## Cerablanket® Cerachem® Blanket Cerachrome® Blanket

### Main Properties

		Cerablanket®	Cerachem® Blanket	Cerachrome® Blanket
• Classification temperature	°C	1260	1425	1425

### Properties Measured at Ambient Conditions (23°C/50% RH)

• Colour		white	white	blue/green
• Density	kg/m <sup>3</sup>		64 up to 160 (4 densities available)	
• Tensile strength (NF-B-40-456)				
64 kg/m <sup>3</sup>	kPa	39	39	35
96 kg/m <sup>3</sup>	kPa	78	78	70
128 kg/m <sup>3</sup>	kPa	103	103	93
160 kg/m <sup>3</sup>	kPa	127	127	115

### High Temperature Performance

• Permanent linear shrinkage (NF-B-40-456) after 24 hours isothermal heating at:

1000 °C	%	1.5	-	1.5
1100 °C	%	2.2	-	2.2
1200 °C	%	3.0	1.0	2.7
1300 °C	%	5.5	2.0	3.5
1400 °C	%	-	3.0	4.0
1500 °C	%	-	-	5.0

• Thermal Conductivity at mean temperature of (all 3 grades):

		64 kg/m <sup>3</sup>	96 kg/m <sup>3</sup>	128 kg/m <sup>3</sup>	160 kg/m <sup>3</sup>
200 °C	W/m.K	0.07	0.06	0.06	-
400 °C	W/m.K	0.12	0.11	0.10	0,09
600 °C	W/m.K	0.20	0.16	0.15	0.13
800 °C	W/m.K	0.30	0.23	0.20	0.18
1000 °C	W/m.K	0.43	0.32	0.27	0.25

• Specific heat at

1090 °C (All 3 grades)	kJ/kg.K		1.13	
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### Chemical Composition

Al <sub>2</sub> O <sub>3</sub>	%	46.5	34.9	42.6
SiO <sub>2</sub>	%	53.3	50.0	54.3
Cr <sub>2</sub> O <sub>3</sub>	%	-	-	2.8
ZrO <sub>2</sub>	%	-	15.2	-
Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>	%	0.15	0.15	0.15
CaO + MgO	%	0.05	0.09	0.10
Na <sub>2</sub> O + K <sub>2</sub> O	%	0.10	0.10	0.10

### Availability and Packaging

Blankets are packed in cartons, on pallets wrapped in stretchable film.

Thick (mm)	Cerablanket				Cerachem Blanket				Cerachrome Blanket		Length (mm)	Width (mm)	m <sup>2</sup> /Carton
	64	96	128	160	64	96	128	160	96	128			
6		X	X	•							22000	610	13.42
10		X	X	•							18500		11.29
13	X	X	X	•		X	X	•	X	X	14640		8.93
19	•	X	X	•		•	•	•	•	•	9760		5.95
25	X	X	X	X	X	X	X	X	X	X	7320		4.47
38	X	X	X	•	•	•	X	•			4880		2.98
50	•	X	X		•	•	X				3660		2.23

(\*) Marks and width 1220 mm upon request (subject to minimum order requirements).

The values given herein are typical average values obtained in accordance with standard test methods and subject to normal manufacturing variations. They are supplied as technical data and may change without notice. Contact our company to obtain detailed information.

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