

MAFTEC Blanket



TYPE

Refractory fibre blanket.

MAXIMUM CONTINUOUS USE TEMPERATURE

1600°C

The maximum continuous use temperature depends on the application. In case of doubt, refer to your local Morgan Thermal Ceramics distributor for advice.

Datasheet Code 5-6-09 E

MSDS Code 104-9-EURO REACH

DESCRIPTION

MAFTEC Blanket is made from pure mullite fibre only, needled on both sides, and contains no binder or other added constituent. It can be used at continuous operating temperatures up to 1600°C, under oxidizing, neutral or slightly gas-rich conditions, retaining its original toughness, strength and soft, fibrous structure after extended use at this temperature.

MAFTEC Blanket is more resistant to acid and alkaline solutions than conventional alumino-silicate fibre blankets.

Being virtually free of shot, it has exceptionally good thermal insulation characteristics.

FEATURES

- Because of its microcrystalline structure, MAFTEC Blanket is suited for continuous operation at 1600°C
- Very low thermal conductivity
- Very low shrinkage at 1600°C
- Resistant to thermal shock
- MAFTEC Blanket is ideal for the manufacturing of modular blocks because it remains soft up to 1600°C
- Good sound absorption
- High strength make it easy to handle and prevents tearing or punching around anchors
- Chemically stable and free of corrosive agents
- Low heat storage

APPLICATIONS

- Furnace and kiln lining (heat treatment, ceramic fast firing, petroleum and chemical)
- High temperature gaskets
- Furnace door seals
- High temperature filter media

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MAFTEC Blanket

Maximum continuous use temperature

°C	1600
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Properties Measured at Ambient Conditions (23°C/50% RH)

Colour	white	
Density (Kg/m ³)	96	128
Tensile strength (NF-B-40-454) (kPa)	93	103

High Temperature Performance

Permanent linear shrinkage after 24 hours isothermal heating at:	
1300°C	0.3%
1400°C	0.8%
1500°C	0.9%
1600°C	1.0%

Typical Chemical Analysis (%)

Al ₂ O ₃	72
SiO ₂	28
Fe ₂ O ₃	0.03
TiO ₂	0.01
CaO + MgO	traces
Na ₂ O + K ₂ O	0.06

Thermal conductivity (NFB-40-456) at mean temperature of:

	96kg/m ³	128kg/m ³
400°C	0.08 (W/m.K)	0.08 (W/m.K)
500°C	0.10 (W/m.K)	0.09 (W/m.K)
600°C	0.13 (W/m.K)	0.12 (W/m.K)
700°C	0.17 (W/m.K)	0.14 (W/m.K)
800°C	0.19 (W/m.K)	0.17 (W/m.K)
900°C	0.23 (W/m.K)	0.20 (W/m.K)
1000°C	0.27 (W/m.K)	0.24 (W/m.K)
1200°C	0.39 (W/m.K)	0.33 (W/m.K)
1400°C	0.58 (W/m.K)	0.48 (W/m.K)
Specific heat capacity at 1090°C	1.25 (kJ/kg.K)	

Thick (mm)	Density kg/m ³ 96 128		Length (mm)	Width (mm)	Blankets/carton	m ² /carton
6	X	O	3600	610	12	26.52
12.5	X	X	3600	610	6	13.17
25	X	X	3600	610	3	6.58

The values given herein are typical values obtained in accordance with accepted test methods and are subject to normal manufacturing variations.

They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes.

Check with your Thermal Ceramics office to obtain current information.

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