

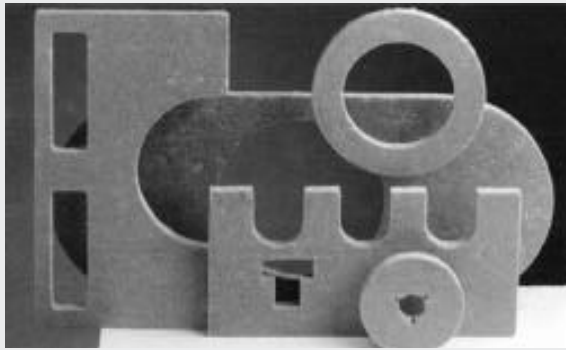
Cerafelt



Datasheet Code 5-5-08 E

MSDS Code 104-9-EURO REACH

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DESCRIPTION

Cerafelt TM is an insulating refractory felt, obtained by hot pressing. It is made from Cerachem fibres, bonded with an organic binder which begins to burn out at 180°C.

This special binder makes Cerafelt particularly suitable for die-cutting operations. Semi rigid, it is neither brittle nor dusty.

Cerafelt optimizes the manufacture of complex, die-cut shapes to close tolerances.

With a choice from eight densities and seven thicknesses, Cerafelt offers a grade to suit most requirements.

Made from chemically stable fibres, lightweight and very insulating, Cerafelt is a multi-purpose product.

TYPE

Refractory fibre felt.

CLASSIFICATION TEMPERATURE

1320°C

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

FEATURES

- Wide range of densities: eight grades from 48kg/m³ up to 384kg/m³
- High temperature resistance
- Very low thermal conductivity
- Particularly suited to cutting operations (with saw, water jet or by stamping)
- Flexible or semi-rigid, depending on density selected
- Chemically stable
- High sound absorption properties
- Precise thicknesses
- Resistant to thermal shock
- Low heat storage

APPLICATIONS

- High temperature gaskets
- Expansion joints for furnace, kiln and boiler linings
- Die cut shapes for domestic appliances
- Thermal barrier media
- Insulating thermal break

Cerafelt



MAIN PROPERTIES

Classification temperature °C 1320

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

- Colour yellow
- Density (depending on grade) kg/m³ 48 up to 384

High Temperature Performance

- Loss on ignition (depending on grade) % 4 up to 12
- Permanent linear shrinkage (NFB-40-456) after 24 hours isothermal heating at:
 - 1260°C % 2.5
 - 1320°C % 3
- Thermal conductivity (NFB-40-456) at mean temperature of:

	48kg/m ³	64kg/m ³	96kg/m ³	128kg/m ³	160kg/m ³	192kg/m ³	288kg/m ³	384kg/m ³
300°C	0.11	0.10	0.08	0.08	0.07	0.07	0.07	0.06
500°C	0.20	0.17	0.14	0.12	0.11	0.11	0.10	0.10
700°C	0.33	0.27	0.21	0.18	0.16	0.15	0.13	0.13
900°C	0.51	0.41	0.31	0.25	0.22	0.20	0.17	0.15
1000°C	0.75	0.59	0.42	0.34	0.29	0.25	0.21	0.18

- Specific heat capacity at 540°C kJ/kg.K 1.13

Chemical Composition

SiO ₂	%	49.7
Al ₂ O ₃	%	35.1
ZrO ₂	%	14.7
Fe ₂ O ₃	%	0.1
CaO + MgO	%	0.05
Na ₂ O + K ₂ O	%	0.2

Availability and Packaging

Standard size 1220 x 1070mm. Size 2450 x 1070mm, other densities and thicknesses upon request. Cerafelt is packed in cartons on pallets.

Thick mm	Density kg/m ³							
	48	64	96	128	160	192	288	384
3				X	X	X	X	X
6		X	X	X	X	X	X	X
10		X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	
19	X	X	X	X	X	X		
25	X	X	X	X	X	X		
38			X					

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.