Fiberfrax® SP Mat™

DESCRIPTION

Fiberfrax SP Mat is a premium grade insulating mat manufactured from Fiberfrax refractory ceramic fibres. SP Mat offers a more consistent density and a lower shot content than traditional ceramic fibre blankets. Fiberfrax SP Mat is completely inorganic and so retains its strength, flexibility and thermal properties in many working environments, without the generation of smoke or fumes. SP Mat is available in a range of density and thickness combinations.

GENERAL CHARACTERISTICS

Fiberfrax SP Mat has the following outstanding characteristics:

- High temperature stability
- Low thermal conductivity and heat storage
- High tensile strength and resiliency
- Resistance to thermal shock and chemical attack
- Consistent density and uniform profile

TYPICAL APPLICATIONS

- Controlled cooling of cast parts
- Nuclear insulation
- Aerospace insulation
- Automotive heat shielding
- Industrial catalytic heating

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.

Start saving energy now.
Contact your local distributor.

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TYPICAL PRODUCT PARAMETERS

		SP Mat	
Typical Chemical Analysis (wt.%)			
SiO_2		54.0 - 58.0	
Al_2O_3		42.0 - 46.0	
$Fe_2O_3 + TiO_2$		<0.2	
Alkalis		<0.25	
Physical Properties			
Colour		White	
Classification Temperature (°C)		1250	
Melting Point (°C)		1800	
Mean Fibre Diameter (microns)		2.0	
Specific Heat at 1000°C (J/kgK)		1040	
Permanent Linear Shrinkage (%) 24 hour soak			
1250 °C		2.5	
Density (kg/m³)	**64**	**96**	**128**
Thermal Conductivity (W/mK)			
Mean Temp.			
400 °C	0.10	0.10	0.09
600 °C	0.16	0.15	0.12
800 °C	0.24	0.22	0.17
(Tensile Strength kPa)			
	25	50	65

*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. For assistance or clarification please contact your nearest Unifrax Engineering office. Where appropriate Physical Properties data measured according to EN 1094-1.

AVAILABILITY

Thickness (mm)	Density (kg/m³)			Roll Length (m)
	64	96	128	
6		✓	✓	7.5 (x4)
10	✓	✓	✓	20
13	✓	✓	✓	15
19	✓	✓	✓	10
25	✓	✓	✓	7.5

Standard roll width is 610mm. Other thicknesses / sizes may be available on request subject to minimum order requirements.

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: