Fiberfrax® & High Temperature Mastics

DESCRIPTION

Fiberfrax Mastics are insulation materials which are composed of Fiberfrax refractory ceramic fibres dispersed in high temperature binders, which upon drying produce a strong insulating structure with low thermal conductivity. Fiberfrax Mouldable 160 contains both RCF and polycrystalline fibres, and High Temperature Mouldable contains only polycrystalline fibres.

These versatile products can be caulked, trowelled and/or moulded quickly and easily into place for use in filling, sealing, repair and general packing applications

GENERAL CHARACTERISTICS

Fiberfrax & High Temperature Mastics have the following outstanding characteristics:

- Low thermal conductivity
- Resistance to thermal shock
- Excellent vibration resistance
- Resistance to erosion
- Low shrinkage
- Good adhesion

TYPICAL APPLICATIONS

- Filling of cracks in refractory lining & expansion joints
- Casing “hot spot” repairs (refractory or fibre lined equipment)
- Furnace door/jamb seals
- Sealing of gaps including windows & flue elements
- Trough linings/coatings for non-ferrous metals

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.

Unifrax Ltd.
T:+44 (0)1744 88 7600 F:+44 (0)1744 88 9916
www.unifrax.com

TYPICAL PRODUCT PARAMETERS

Fiberfrax	PUMP 140	MOULD 120	MOULD 160	High Temp MOULD 175	MOULD 120HD
Physical Properties					
Colour	White	White	White	White	Brown
Product Form	Putty	Sticky putty	Pasty mastic	Pasty mastic	Malleable block
Use Limit. (°C) *	1400	1200	1600	1750	1200
Wet Density (kg/m³)	1050	1280	1500	1500	1500
Dry Density (kg/m³)	300-350	640	1100	1100	900
Thermal Conductivity (W/mK)					
Mean Temp.					
600 °C	0.09	0.21	0.28	0.09	
800 °C	0.13	0.25	0.32	0.13	
1000 °C	0.19	0.31	0.43	0.19	
1200 °C			0.52	0.50	
1400 °C				0.68	
Permanent Linear Shrinkage (%) 24 hour soak					
1100 °C		2.0			2.0
1200°C			<5.0		
1400°C	<5.0			<5.0	

*The maximum continuous limit temperature for these products depends upon application conditions. For certain applications operational 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.

INSTALLATION & DRYING PROCEDURES

Installation

Fiberfrax Pumpable 140 is easily installed using a trowel, spatula, applicator gun or Fraxpump.

Fiberfrax Mouldable 120 may be installed using a trowel or a gun applicator.

Fiberfrax Mouldable 160 & HT Mouldable 175 are quite stiff mastics and ideally installed using a trowel. These mastics may be installed using a high torque applicator gun, if necessary.

Fiberfrax 120HD Mastic is in the form of a malleable block can be moulded and installed by hand.

Drying

Fiberfrax Mastics can be dried at room temperature but this requires an extended period of time. Therefore forced air heating at 100°C is recommended. Rapid firing to operating temperature is not recommended. During the first firing, some initial out-gassing can be expected at elevated temperatures. Ventilation is sometimes required to permit escape of steam.

AVAILABILITY

Fiberfrax	PUMP 140	MOULD 120	MOULD 160	High Temp MOULD 175	MOULD 120HD
300g Cartridge	✓				
420g Cartridge		✓			
600ml Sachet	✓				
5kg Pail	✓	✓	✓	✓	
20kg Pail	✓				
25kg Pail		✓			
15kg (3x5kg) Blocks					✓

Shelf Life & Storage

Fiberfrax & High Temp. Mastics can be stored for up to 6 months, based on unopened container kept in cool dry storage conditions. Storage between 5 and 20°C is recommended. (Excessive heat will shorten the shelf life and freezing will result in irreversible damage to the product.)

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:

Information contained in this publication is for illustrative purposes only and is not intended to create any contractual obligation. Further information and advice on specific details of the products described should be obtained in writing from a Unifrax Corporation company (Unifrax España, Unifrax France, Unifrax GmbH, Unifrax Italia, Unifrax Limited, Unifrax s.r.o.). Unifrax maintains a continuous programme of product development and reserves the right to change product specifications without prior notice. Therefore, it maintains at all times the responsibility of the customer to ensure that Unifrax materials are suitable for the particular purpose intended. Similarly, insofar as materials not manufactured nor supplied by Unifrax are used in conjunction with or instead of Unifrax materials, the customer should ensure that all technical data and other information relating to such materials has been obtained from the manufacturer or supplier. Unifrax accepts no liability arising from the use of such materials. All sales made by a Unifrax Corporation company are subject to that company's Terms and Conditions of Sale, copies of which are available on request.