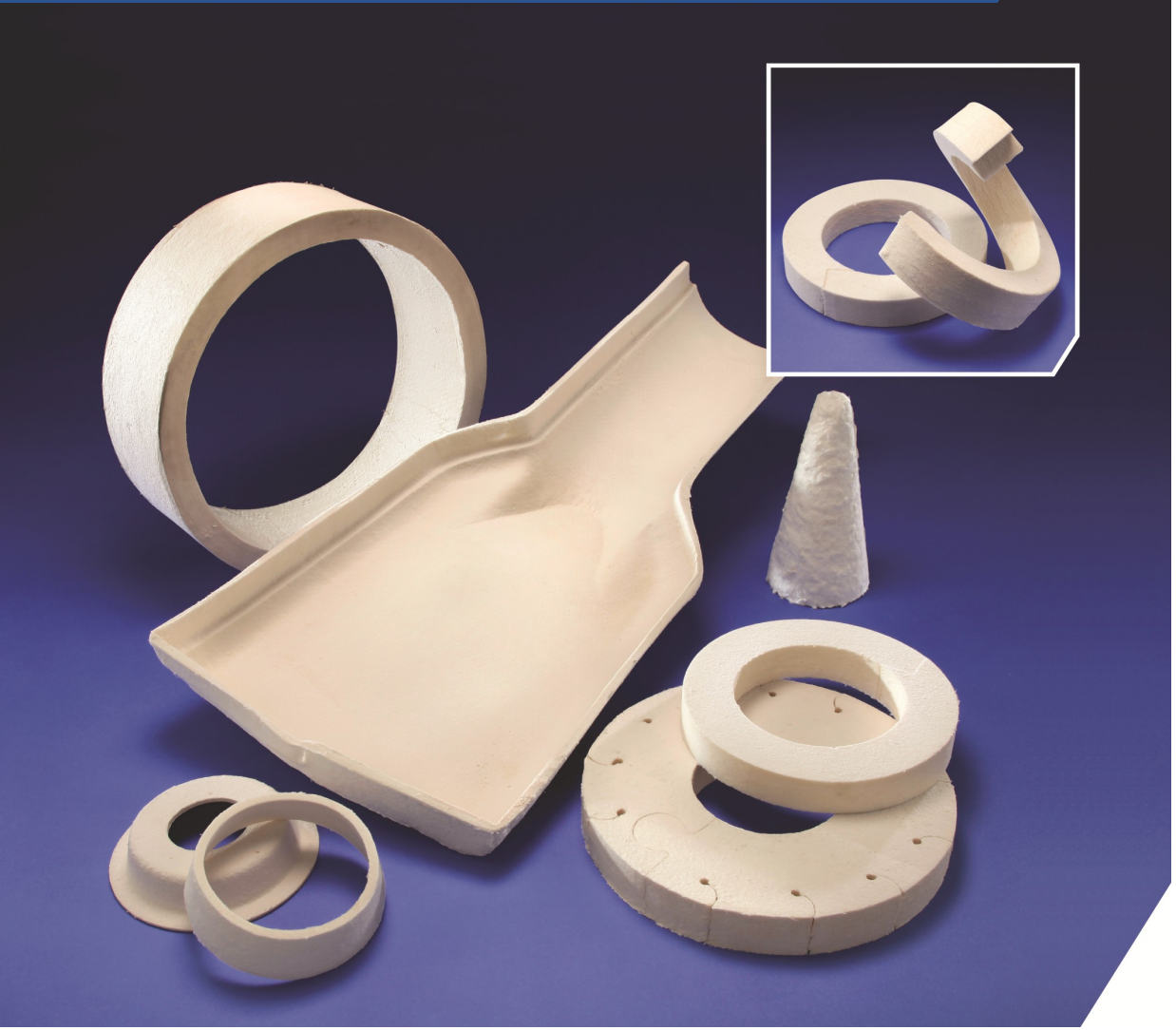
Fiberfrax® & High Temperature Flexiform™



Start saving energy now.
Contact your local distributor.

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DESCRIPTION

Fiberfrax and High Temperature Flexiform shapes and felts are manufactured from Fiberfrax refractory ceramic fibre and/or high alumina polycrystalline fibre, blended with specially selected organic binders to give flexible insulating shapes with exceptional characteristics. The vacuum forming manufacturing method permits considerable freedom to vary shape, thickness, density and hardness. Flexiform shapes and felts often provide the most economical answer to producing large quantities of parts in simple or complex configurations for a wide range of applications up to 1550°C.

GENERAL CHARACTERISTICS

Fiberfrax and High Temperature Flexiform shapes and felts have the following outstanding characteristics:

- High temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Lightweight
- Complex shape capability

TYPICAL APPLICATIONS

- Gaskets in Aluminium foundries
- Convex and flat gaskets in blast furnace
- Walking beam furnace - skid rails and risers
- Expansion joints
- Pipe insulation
- Catalytic convertor insulation
- Stopper rod gaskets
- Furnace skid rail insulation

Information on other applications available upon request. 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.

UNIFRAX

FIBERFRAX AND HIGH TEMPERATURE FLEXIFORM SHAPES AND FELTS

Flexiform shapes and felts are highly flexible products containing selected organic binders. This high degree of flexibility gives excellent compressive recovery characteristics and ease of installation in applications where a rigid shape would prove unsuitable. Various formulations are available to cover a range of application temperatures and requirements. For specific customer requirements it may be possible to offer a combination of both rigid and flexible properties combined in one product.

TYPICAL PRODUCT PARAMETERS

Fiberfrax & High Temperature Flexiform	*120*	*140*	*150*	*160*
Typical Chemical Analysis (wt. %) +/- 10%				
SiO_2	*54.0*	*48.0*	*38.0*	*34.0*
Al_2O_3 (+ ZrO_2#)	*46.0*	*52.0#*	*62.0*	*66.0*
Trace	*<1.0*	*<1.0*	*< 1.0*	*< 1.0*
Physical Properties				
Colour	*White*	*White*	*White*	*White*
Product Density (kg/m³)+	*<350*	*<350*	*<350*	*<350*
*Use Limit (°C) **	*1200*	*1400*	*1500*	*1600*
Loss on ignition (wt.%)	*<10.0*	*<10.0*	*<10.0*	*<10.0*
Thermal Conductivity (W/mK)				
Mean Temp.				
600 °C	*0.11*	*0.12*	*-*	*-*
800 °C	*0.14*	*0.15*	*0.15*	*0.17*
1000 °C	*0.19*	*0.21*	*0.20*	*0.25*
1200 °C	*-*	*0.29*	*0.28*	*0.32*
Permanent Linear Shrinkage (%) 24 Hour Soak				
1100 °C	*2.3*	*-*	*-*	*-*
1200 °C	*3.3*	*-*	*-*	*-*
1300 °C	*-*	*2.1*	*-*	*-*
1400 °C	*-*	*2.9*	*2.6*	*2.1*
1500 °C			*3.9*	*2.5*

*Use limit refers to the maximum short term temperature limit. The maximum continuous use limit for these products depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office.

+Density is indicative and relates to product characteristics before any secondary treatment. Actual density is dependent on piece size and geometry.

Where appropriate Physical Properties data measured according to EN 1094-1.

Contains ZrO_2 / ZrO_2 free formulation available.

AVAILABILITY

Flexiform shapes and felts are engineered to specific customer requirements and are therefore made order. Please contact your local Unifrax sales office to discuss your particular 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: