

Insulfrax® 1300 HT Blanket

Description

Insulfrax® 1300 HT Blanket products represent the next generation of low bio-persistent (LBP) thermal insulation from Unifrax. This new innovative product combines superior thermal performance with enhanced operating temperature capability. Insulfrax 1300 HT Blanket, a lightweight needled blanket, is manufactured using proprietary fiberization techniques, offering both a 1300 grade classification and a use limit temperature in applications up to 1200°C. Insulfrax 1300 HT blankets are manufactured from alkaline earth silicate (AES) wool, and provide effective solutions to a variety of thermal management challenges over a broad temperature range. Insulfrax 1300 HT Blankets are completely inorganic and binder free with a smooth surface finish. Insulfrax 1300 HT Blankets retain their strength, flexibility and thermal properties in many working environments without the generation of smoke or fumes. Insulfrax 1300 HT Blanket has excellent chemical stability and is unaffected by most chemicals except hydrofluoric and phosphoric acids and concentrated alkalis. If wet by water or steam, thermal and physical properties remain unaffected after drying.

Insulfrax 1300 HT fibre meets the requirements specified under Note Q of European Regulation 1272/2008 and therefore exonerated from labelling requirements in Europe.

General Characteristics

Insulfrax 1300 HT Blanket products have the following outstanding characteristics:

- High temperature stability (up to 1300°C)
- Low thermal conductivity
- Thermal shock resistance
- High tensile strength & resiliency
- Lightweight
- Excellent flexibility
- Low heat storage

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.



Typical Applications

Insulfrax 1300 HT Blankets are the product of choice for a wide range of applications in a number of industries.

- High-temperature furnace and kiln linings
- Furnace door linings and seals
- Boiler insulations
- Pipe and duct insulation
- Heat shields
- Seals and gaskets
- Carbon baking furnace covers
- Glass tank crown insulation
- Expansion joints

Typical Product Parameters

Insulfrax	1300 HT		
<i>Typical Chemical Analysis (fibre wt. %)</i>			
SiO ₂	72.0 - 78.0		
CaO + MgO	21.0 - 27.0		
Other Oxides	<3.0		
<i>Physical Properties</i>			
Colour	White		
Classification Temperature (°C)*	1300		
Use Limit (°C)*	1200		
Mean Fibre Diameter (microns)	3.6		
<i>Permanent Linear Shrinkage (%) 24 hour soak EN 1094-1</i>			
1300 °C	3.4		
Density (kg/m³)	96 kg/m³	128 kg/m³	160 kg/m³
<i>Thermal Conductivity (W/mK) - ASTM C-201</i>			
Mean Temperature			
200°C	0.07	0.06	0.06
400°C	0.11	0.10	0.09
600 °C	0.17	0.16	0.15
800 °C	0.26	0.23	0.21
1000 °C	0.36	0.31	0.29
1200 °C	0.56	0.49	0.45
<i>Tensile Strength (kPa)</i>			
	44	58	62

* The maximum continuous use limit temperature for these products depends upon operating and application conditions, and also the engineered design of the insulation lining. For additional information and support regarding product performance or to identify the recommended product for your application, please contact your nearest Unifrax Application Engineering office.

Data shown is based on average results of tests conducted under standard procedures and are subject to variation.



Availability

Thickness (mm)	Density (kg/m ³)			Roll length (m)
	96	128	160	
13mm	✓	✓	*	14.64
19mm	*	*	*	10.00
25mm	✓	✓	✓	7.32
38mm	✓	✓	*	5.00
50mm	✓	✓	✓	3.66

Standard roll width is 610mm.

Products in the table above listed with a checkmark (✓) are standard items.

Products marked with an asterisk (*) are not standard items but are available on request and may be subject to minimum order requirements. Other thicknesses, sizes and densities are available on request subject to minimum order requirements.

Versions with aluminium foil and other coverings are also available.

Handling Information

A Safety Data Sheet (SDS) 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.

Insulfrax fibre has a high solubility in simulated body fluids and hence carries no hazard classification, meeting stringent European regulatory requirements. Insulfrax 1300 HT fibres are exonerated from classification as hazardous (tested according to Note Q Regulation (EC) No. 1272/2008).



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The test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.

Product Information Sheets are periodically updated by Unifrax. Before relying on any data or other information in this Product Information Sheet, you should confirm that it is still current and has not been superseded. A Product Information Sheet that has been superseded may contain incorrect, obsolete and/or irrelevant data and other information.

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