Product Information Sheet

Insulfrax®

Insulfrax® LTX™ Blanket

Description

Insulfrax® LTX™ Blankets are the latest addition to the Insulfrax product family. Insulfrax LTX offers the same benefits as previous Insulfrax blankets, now with physical properties enhanced to improve both thermal performance and handling. These lightweight needled blankets combine innovative proprietary technology with Insulfrax proven performance to create the best low-biopersistent Insulfrax blanket available from Unifrax today. Insulfrax LTX blankets are manufactured from alkaline earth silicate (AES) wool, and provide effective solutions to a variety of thermal management challenges.

The new Insulfrax LTX products can help customers reduce costs. The enhanced LTX fibre performance helps companies reduce their energy costs and meet increasingly strict carbon emission targets, without increasing the amount of insulation required. Alternatively, customers can save on material costs by using less insulation to achieve the same performance as standard AES blankets. Customers can save money by reducing their lining thickness up to 25%, freeing up valuable space in furnaces and ovens.

Insulfrax LTX Blankets are completely inorganic and binder free with an improved, smoother surface finish. Insulfrax LTX Blankets retain their strength, flexibility and thermal properties in many working environments without the generation of smoke or fumes. These new blankets are less dusty, which makes handling and cutting the material easier, resulting in faster installation of the product onsite and, in some cases, reduced waste of material. Insulfrax LTX Blankets are also printed on the surface of the blanket, which makes installation tracking and inspection on the job site or in the fabrication shop easier.

Available in a range of density and thickness combinations, Insulfrax LTX Blankets can be used in a wide variety of applications and are especially suited for use as high-temperature gaskets, wraps and heat shields.

General Characteristics

Insulfrax LTX Blanket products have the following outstanding characteristics:

- Exceptional insulating properties
- High temperature stability (up to 1200°C)
- Resistance to thermal shock
- High tensile strength & resiliency
- Lightweight
- Excellent flexibility
- Good acoustic properties

Typical Applications

Insulfrax LTX Blankets are the next generation of low biopersistent Insulfrax fiber and the product of choice for a wide range of applications in a number of industries including:

Appliances
- Residential self-cleaning ovens
- High-temperature commercial cooking appliances

Hearth Products
- Chimney Insulation

Primary Metals
- Expansion joint seals
- Aluminium transfer ladle covers
- Backup insulation for dense refractory linings
- Backup insulation for Fiberfrax® or Isofrax® linings
- Maintenance blanket
- Heat shields

Metals Processing
- Stress relieving blankets
- Seals and gaskets

Petrochemical/Power
- Reusable insulating pads
- External boiler and duct insulation

Ceramic and Glass
- Glass tank crown insulation
- Expansion joints
- Carbon baking furnace covers

Passive fire protection

Exhaust Insulation and Heat Shields

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Typical Product Parameters

	Insulfrax LTX Blanket			
Typical Chemical Analysis (wt. %)				
SiO_2	61.0 – 67.0			
CaO	27.0 – 33.0			
MgO	2.5 – 6.5			
Al_2O_3	<1.0			
Fe_2O_3	<0.6			
Physical Properties				
Colour	White			
Classification Temperature (C°)*	1200			
Use Limit (C°)*	1100			
Melting Point (C°)	>1330			
Mean Fibre Diameter (microns)	4.0			
Permanent Linear Shrinkage (%) 24 hour soak EN 1094-1				
1200°C	1.0			
Density (kg/m³)	**64**	**96**	**128**	**160**
Thermal Conductivity (W/mK) – ASTM C201				
Mean Temp.				
200°C	0.06	0.06	0.05	0.05
400°C	0.11	0.09	0.08	0.08
600°C	0.17	0.14	0.12	0.11
800°C	0.26	0.20	0.18	0.15
1000°C	0.38	0.29	0.25	0.21
Tensile Strength (kPa)				
	45	65	85	100

*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. Results should not be used for specification purposes.

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Availability

Thickness (mm)	Density (kg/m³)				Roll Length (m)
	64	96	128	160	
6		*	✓		22.00
10		*	*		18.30
13		✓	✓	*	14.64
19	*	✓	✓	*	10.00
25	✓	✓	✓	✓	7.32
38	*	✓	✓	*	5.00
50	✓	✓	✓	✓	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 (e.g. 80 kg/m³) 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 fibres are exonerated from classification as hazardous (tested according to Note Q regulation (EC) No. 1272/2008).

For additional information about product performance or to identify the recommended product for your application, please email the Unifrax Application Engineering Group: applicationengineering@unifrax.com.

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