Product Information Sheet

Insulfrax® LT Blanket

DESCRIPTION

Introducing the Insulfrax LT Blanket. Designed with enhanced physical properties to deliver improved thermal performance. This cutting-edge blanket provides all the benefits of its predecessor and more. Insulfrax LT Blanket is manufactured from alkaline earth silicate (AES) wool. It is an excellent choice for companies that require compliant low bio-persistent (LBP) insulation to solve heat management challenges.

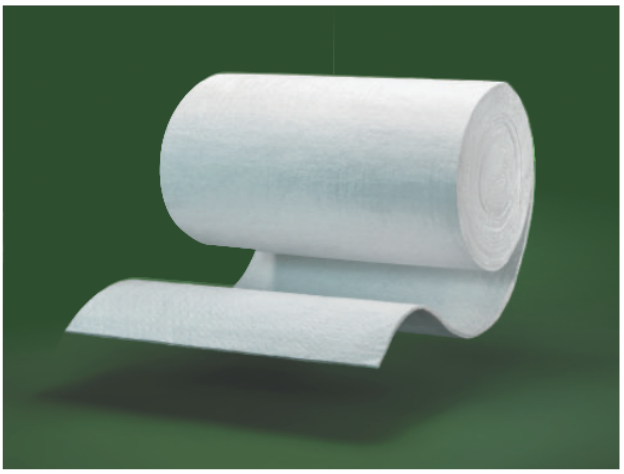
Insulfrax LT Blankets are composed of Insulfrax fibers, which are made from innovative Alkegen proprietary technology to create spun fibers with lower shot content. This forms a flexible needled blanket with improved handling and tensile strength, as well as lower thermal conductivity. It is especially suitable for demanding environments where temperature control is critical. Insulfrax LT Blanket is completely inorganic, meaning it will not generate smoke or fumes during use, making it a safe and sustainable option for a range of industries.

GENERAL CHARACTERISTICS

Insulfrax LT Blankets products have the following outstanding characteristics:

- Exceptional insulating properties (Low Thermal Conductivity & Low Heat Storage)
- High temperature stability up to 1200°C (2192°F)
- Resistance to thermal shock
- Good handling strength
- Excellent flexibility & resiliency
- Light weight
- Good sound absorption
- Completely inorganic

Information on other applications is available upon request. Any new and/or special use of these products, whether in an application listed in our literature, is advised to be submitted to our Alkegen Application Engineering department for review and guidance on material selection.



TYPICAL APPLICATIONS

Power Generation

- Heat Recovery Steam Generators (HRSG) Duct Insulation
- Gas & Steam Turbines
- Turbine Exhausts
- Silencer Panels
- Boilers & Duct Insulation

Appliance

- Residential Ovens
- High-Temperature Commercial Cooking Appliances
- Hearth Chimney Insulation
- High-Temperature Gaskets

Non-Ferrous (Aluminum)

- Aluminum Transfer Ladle Covers
- Aluminum Melting/Holding Furnace Doors
- Carbon Baking Furnace Covers

General Use & Other Industries (Petrochemical, Ferrous, Pollution Control, etc.)

- High Temperature Furnaces, Boilers, And Fired Heaters
- Back-Up Insulation
- High Temperature Seals & Gaskets
- Heat Shields & Maintenance Blanket
- Expansion Joints
- Stress Relieving Blankets
- Glass Tank Crown Insulation
- Flue Insulation
- Regenerative Thermal Oxidizers (RTO)

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TYPICAL PRODUCT PARAMETERS

Insulfrax LT Blanket				
Physical Properties				
Color	White			
Classification Temperature* °C (°F)	1200 (2192)			
Continuous Use Temperature** °C (°F)	1100 (2012)			
Melting Point °C (°F)	>1330 (2426)			
Typical Chemical Analysis (wt. %)				
SiO_2	61 - 67			
CaO	27 - 33			
MgO	2.5 – 6.5			
Al_2O_3	<1.0			
Fe_2O_3	<0.6			
Permanent Linear Shrinkage (EN 1094-1)				
After 24 Hour Soak @ 1200°C (2192°F)	1.0%			
Average Tensile Strength (EN 1094-1)				
Density, kg/m³ (lb/ft³)	64 (4)	96 (6)	128 (8)	160 (10)
Tensile Strength, kPa (psi)	42 (6.1)	60 (8.7)	80 (11.3)	88 (12.8)
Thermal Conductivity (ASTM C201)				
Density, kg/m³ (lb/ft³)	64 (4)	96 (6)	128 (8)	160 (10)
Mean Temperature	Thermal Conductivity, W/m-K (Btu in/hr ft² °F)			
200°C (392°F)	0.06 (0.42)	0.06 (0.42)	0.05 (0.35)	0.05 (0.35)
400°C (752°F)	0.11 (0.76)	0.09 (0.62)	0.08 (0.56)	0.08 (0.56)
600°C (1112°F)	0.17 (1.18)	0.14 (0.97)	0.12 (0.83)	0.11 (0.76)
800°C (1472°F)	0.26 (1.80)	0.20 (1.39)	0.18 (1.25)	0.15 (1.04)
1000°C (1832°F)	0.38 (2.63)	0.29 (2.01)	0.25 (1.73)	0.21 (1.46)

*The Classification Temperature is not a definition of the operational temperature use limit of these products, especially when long-term physical or dimensional stability is a factor. The classification temperature is the temperature at which irreversible linear shrinkage does not exceed a given value after a 24-hour heat soak test. For applications where long-term stability is not a requirement, products may be successfully used at temperatures well in excess of their Classification Temperature. For continuous use applications requiring long-term stability, routine practice is to utilize materials in respect to their continuous use temperature.

**The Continuous Use Temperature is a recommended maximum operating temperature for the material usage under clean, oxidizing atmosphere conditions. For certain application conditions (specific chemical contaminants, reducing atmospheres, etc.), the Continuous Use Temperature may be reduced.

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. For assistance or further clarification, please contact your nearest Alkegen Application Engineering office.

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AVAILABILITY

Thickness mm (inch)	Density kg/m³ (lb/ft³)				Roll Length Meter (Linear Ft.)
	64 (4)	96 (6)	128 (8)	160 (10)	
12.5 (0.5)	*	*	✓	*	7.6 (25)
25.5 (1)	✓	✓	✓	*	7.6 (25)
38 (1.5)	*	*	✓	*	3.8 (12.5)
50 (2)	*	✓	✓	*	3.8 (12.5)

Standard roll width is 0.6 meters (24"). Variations featuring other dimensions, aluminum foil or alternative coverings may be obtainable upon inquiry. Products listed with a checkmark (✓) are standard items. Asterisk (*) marked items are subject to minimum order requirements. Insulfrax LT Blankets are produced and distributed worldwide; however, packaging, density, and thickness may differ based on regional needs. To obtain information on specific packaging options please reach out to your nearest Alkegen representative.

HEALTH AND SAFETY INFORMATION

Insulfrax fiber is an AES (alkaline earth silicate) wool that is exonerated from classification by virtue of Note Q, as detailed under regulation (EC) No 1272/2008 (CLP) and as such is considered to be a low bio-persistent (LBP) substance. (These materials have been designed to allow rapid clearance from the lung, following inhalation.)