ISOFRAX® 1400 BLANKET

INSULCON
LEADER IN HIGH TEMPERATURE SOLUTIONS

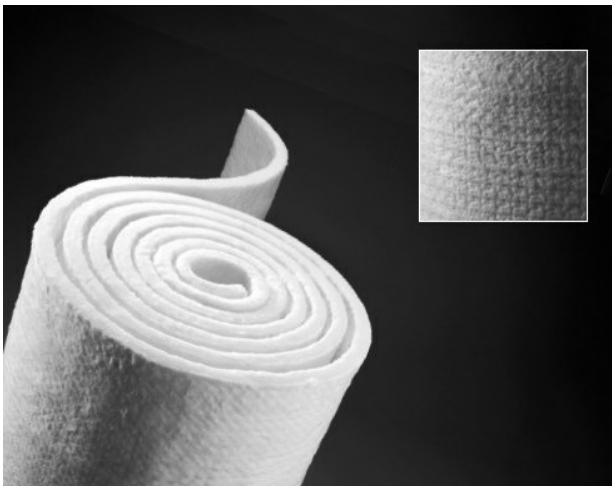
TECHNICAL DATASHEET

LEADER IN HIGH TEMPERATURE SOLUTIONS

Description

Isofrax® 1400 blanket is the latest generation of proven, revolutionary low bio-persistent fibre technology. **Isofrax® 1400 blanket** is manufactured using enhanced fiberization techniques combined with new proprietary processing technology, offering both a 1400 grade classification and an increased use limit temperature in applications up to 1300°C.

The needled blanket is completely inorganic and retains its strength, flexibility and thermal properties in many working environments, without the generation of smoke or fumes. Available in a range of density and thickness combinations, **Isofrax® 1400 blankets** can be used in a wide variety of high-temperature applications.



Classification temperature 1400°C (EN 10940 1)

Isofrax® 1400 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.

General Characteristics

Isofrax® 1400 blanket products have the following outstanding characteristics:

- High-temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Lightweight
- Good handling strength
- Low heat storage
- Excellent flexibility

Typical Applications

- High-temperature furnace and kiln linings
- Furnace door linings and seals
- Boiler insulations
- Pipe and duct insulation
- Heat shields
- Seals and gaskets

Form: A1-134
Effective: 14082023/ka
Supersedes: 03012022/ka
All Rights Reserved
LD: 216

The information, recommendations and opinions set forth herein are offered solely for your consideration, inquiry and verification and are not, in part or total to be construed as constituting a warranty or representation for which we assume legal responsibility. Nothing contained herein is to be interpreted as authorization to practice a patented invention without a license. All rights reserved.

ISOFRAX® 1400 BLANKET

Typical Product Parameters

Typical Chemical Analysis (wt. %)

SiO_2	70 – 80
MgO	18 – 27
Trace	0 – 4

Physical properties

Colour	White
Classification Temperature	1400°C (2550°F)
Use Limit*	1300°C (2370°F)
Melting Point	1520°C (2760°F)
Mean Fibre Diameter (microns)	4.5

Permanent Linear Shrinkage (%) 24h soak
EN 1094-1

1400°C	2.7

Density	**96 kg/m³** (6 pcf)	**128 kg/m³** (8 pcf)	**160 kg/m³** (10 pcf)
Tensile Strength	40 kPa (5.8 psi)	60 kPa (8.7 psi)	80 kPa (11.6 psi)

Thermal Conductivity ASTM C201 Mean Temp.	**W/mK (Btu in/hr ft2 °F)**		
200°C (392°F)	0.07 (0.51)	0.07 (0.49)	0.07 (0.49)
400°C (752°F)	0.13 (0.89)	0.13 (0.90)	0.12 (0.83)
600°C (1112°F)	0.22 (1.56)	0.21 (1.46)	0.19 (1.29)
800°C (1472°F)	0.35 (2.44)	0.31 (2.15)	0.25 (1.76)
1000°C (1832°F)	0.49 (3.37)	0.43 (2.98)	0.35 (2.42)
1200°C (2192°F)	0.66 (4.55)	0.56 (3.89)	0.45 (3.14)

* 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 Insulcon application Engineering office.

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

Availability

Thickness	**Density**			**Roll Length**
	96 kg/m³ (6 pcf)	**128 kg/m³ (8 pcf)**	**160 kg/m³ (10 pcf)**	
13mm (0.5")	✓	✓	*	12.50 m (41 LF)
25mm (1.0")	✓	✓	✓	7.32 m (24 LF)
38mm (1.5")	*	*	*	5.00 m (16.4 LF)
50mm (2.0")	*	✓	*	3.66 m (12 LF)

Form: A1-134
Effective: 14082023/ka
Supersedes: 03012022/ka
All Rights Reserved
LD: 216

The information, recommendations and opinions set forth herein are offered solely for your consideration, inquiry and verification and are not, in part or total to be construed as constituting a warranty or representation for which we assume legal responsibility. Nothing contained herein is to be interpreted as authorization to practice a patented invention without a license. All rights reserved.

ISOFRAX® 1400 BLANKET

Standard roll width is 610 mm (24").
Products in the table above listed with a checkmark (✓) are stocked and available.
Products marked with an asterisk (*) are not stocked as standard but are available on request subject to minimum order requirements.
Other thicknesses/sizes and versions with aluminium foil and other coverings are available upon request.

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.

Isofrax® fibre has a high solubility in simulated body fluids and hence carries no hazard classification, meeting stringent European regulatory requirements.

Isofrax® 1400 fibres are exonerated from classification as hazardous (tested according to Note Q Regulation (EC) No. 1272/2008).

Form: A1-134
Effective: 14082023/ka
Supersedes: 03012022/ka
All Rights Reserved
LD: 216

The information, recommendations and opinions set forth herein are offered solely for your consideration, inquiry and verification and are not, in part or total to be construed as constituting a warranty or representation for which we assume legal responsibility. Nothing contained herein is to be interpreted as authorization to practice a patented invention without a license. All rights reserved.