

Product Information Sheet

Insulfrax

Insulfrax® RTW250 Blanket

DESCRIPTION

Insulfrax RTW250 Blanket is a water repellent, lightweight, flexible needled blanket manufactured from alkaline earth silicate wool. Specially developed to resist water ingress, Insulfrax RTW250 Blanket is especially suited for external use in industrial applications such as industrial pipework and equipment where CUI (corrosion under insulation) is a challenge.

The Insulfrax RTW250 Blanket retains its high-performance water repellency properties at increased operating temperatures, while maintaining its superior thermal performance in use.

These blankets were developed with enhanced physical properties to improve the thermal performance. The enhanced fiber performance helps companies reduce their energy costs and meet increasingly strict carbon emission targets, without increasing the amount of insulation required.

Available in a variety of density and thickness combinations, Insulfrax RTW250 blankets provide effective solutions in a variety of high temperature applications.



GENERAL CHARACTERISTICS

Insulfrax RTW250 Blanket has these outstanding characteristics:

- High Temperature Stability (up to 1200°C)
- Excellent Water Repellency
- Limits the risk of corrosion under insulation
- Resistance to Thermal Shock
- Good Handling Strength
- Excellent Flexibility
- Good Sound Absorption

TYPICAL APPLICATIONS

- Aerial and Accessory Piping
- Tower Piping
- Heat Exchangers
- Coke Reactors (Side, Lid and Lower Cones)
- Storage Tanks (Sides only)
- Pumps and Turbines
- Boilers (Wall, Roof and Accessories)
- Ducting

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, is advised to be submitted to our Alkegen Application Engineering department for review and guidance on material selection.

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TYPICAL PRODUCT PARAMETERS

Insulfrax RTW250 Blanket		
Color	White	
Classification Temperature*, °C (°F)	1200 (2192)	
Continuous Use Temperature **, °C (°F)	1100 (2012)	
Melting Point, °C (°F)	>1330 (2426)	
Maximum Continuous Use Temperature for Water Repellency Performance, °C (°F)	200 (392)	
Fungal Growth Resistance (ASTM C1338)	Pass – No growth	
Water Absorption by Immersion (ASTM C1763) – Mass%	< 5.0	
Water Vapor Sorption (ASTM C1104) – Mass %	0	
Corrosion Resistance: Stress corrosion cracking tendency of austenitic stainless steel (ASTM C692/ASTM C795)	Pass	
Chemical analysis of leachable ions (ASTM C871/ASTM C795)	Pass	
Typical Chemical Analysis (wt.%)		
SiO ₂	61.0-67.0	
CaO	27.0-33.0	
MgO	2.5-6.5	
Al ₂ O ₃	<1.0	
Fe ₂ O ₃	<0.6	
Water repellent coating	<1.0	
Thermal Conductivity (ASTM C201) ‡		
Density, kg/m ³ (lb/ft ³)	96 (6)	128 (8)
Mean Temperature	Thermal Conductivity, W/m-K (Btu in/hr ft ² °F)	
200 °C (392 °F)	0.06 (0.42)	0.05 (0.35)
400 °C (752 °F)	0.09 (0.62)	0.08 (0.56)
600 °C (1112 °F)	0.14 (0.97)	0.12 (0.83)
800 °C (1472 °F)	0.20 (1.39)	0.18 (1.25)
1000 °C (1832 °F)	0.29 (2.01)	0.25 (1.73)

*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.

‡ Thermal conductivity data is based on testing without water repellent finish.

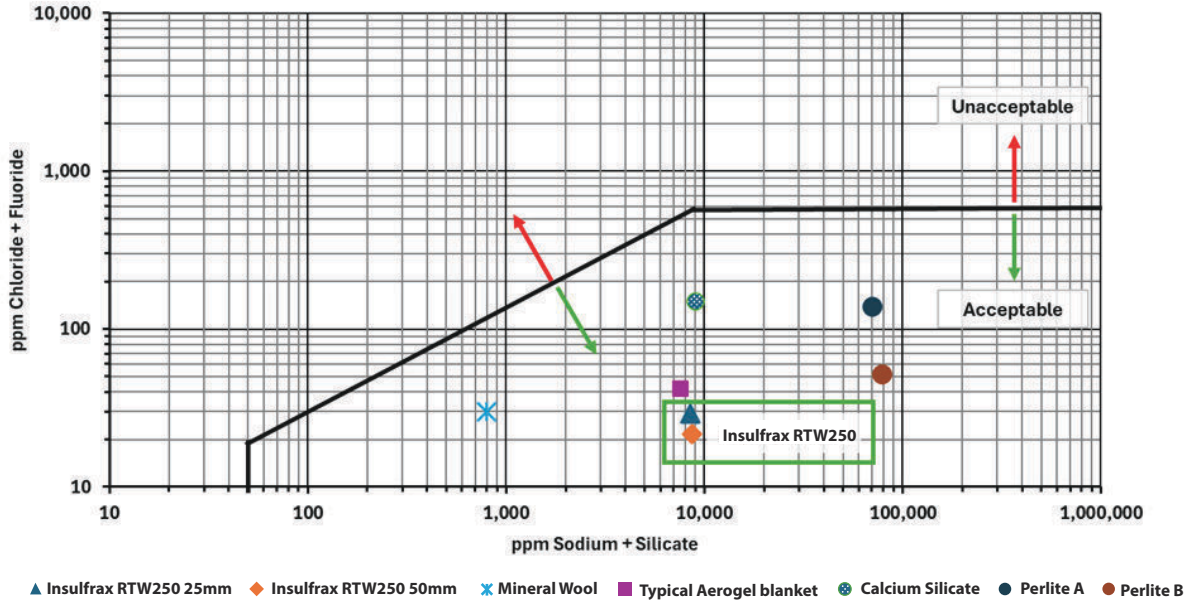
Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. For assistance or further clarification, please contact your nearest Alkegen Application Engineering office.

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Leachable Anions Acceptability Curve – Karnes Test ASTM C871



AVAILABILITY

Thickness, mm (Inch)	Density, kg/m ³ (lb/ft ³)		North America	Europe
	96 (6)	128 (8)	Roll length, m (LF)	Roll length, m (LF)
13 (0.5)	*	*	7.6 (25)	14.64 (48)
25 (1)	*	✓	7.6 (25)	7.32 (24)
38 (1.5)	*	*	3.8 (12.5)	5.00 (16.4)
50 (2)	*	*	3.8 (12.5)	3.66 (12)

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. Standard roll width is 610mm (24”).

HEALTH AND SAFETY 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 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 biopersistent (LBP) substance.

For additional information about product performance or to identify the recommended product for your application, please contact Alkegen Application Engineering at +1 716-768-6298.

The information contained in this publication is for illustrative purposes only and is not intended to create any contractual obligation. The following is a registered trademark of Alkegen: Insulfrax. 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 Alkegen. 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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