Fiberfrax® Durablanket S

DESCRIPTION

Fiberfrax® Durablanket family of lightweight needled blankets are manufactured from Fiberfrax® refractory ceramic fibres and provide effective solutions to a variety of thermal management applications. Fiberfrax® Durablanket products offer superior insulating performance, excellent chemical resistance, flexibility and resilience. Fiberfrax® Durablanket products are completely inorganic and so retain their strength, flexibility and thermal properties in many working environments, without the generation of smoke or fumes. Available in a wide range of density and thickness combinations, Fiberfrax® Durablanket range is one of the most versatile available in the market today.

GENERAL CHARACTERISTICS

Fiberfrax® Durablanket has the following outstanding characteristics :

- Low thermal conductivity & heat storage
- Resistance to thermal shock & chemical attack
- High heat reflectance
- Good sound absorption
- Low shrinkage
- High tensile strength & resiliency
- Asbestos free
- Unlimited shelf life

TYPICAL APPLICATIONS

- CPI heaters & heat treatment furnaces
- High temperature pipe, duct & turbine insulation
- Boilers, kilns & ovens insulations
- Tube seals, gaskets & expansion joints
- Fire protection & acoustic insulation

Fiberfrax® Durablanket S

FIBERFRAX® DURABLANKET S

Fiberfrax® Durablanket S is a premium grade product made from spun 1260°C ceramic fibres. The extra long spun fibres make it one of the strongest blankets available. This coupled with its superior resilience make it particularly tough and suitable for applications involving further handling or in difficult environments.

Individual data sheets are available for the other products in the Durablanket range.

TYPICAL PRODUCT PARAMETERS

Fiberfrax® Durablanket S				
Typical Chemical Analysis (wt.%)				
Al_2O_3	42 - 47			
SiO_2	53 - 58			
Fe_2O_3	< 0.1			
TiO_2	< 0.3			
Leachable Chlorides, ppm	< 10			
Physical Properties				
Colour	White			
Classification Temperature (°C)	1260			
Melting Point (°C)	1760			
Mean Fibre Diameter (microns)	2.6 - 3.4			
Fibre Index (%)	48 - 54			
Shot Content (ASTM) (%)	10 - 15			
Specific Gravity	2.65			
Permanent Linear Shrinkage (%) 24 hour soak				
1200°C	3.0 Max			
1260°C	3.5 Max			
Density (kg/m³)	**64**	**96**	**128**	**160**
Thermal Conductivity , ASTM C-177 (W/mK)				
Mean Temp.				
200°C	0.057	0.056	0.052	0.058
400°C	0.09	0.09	0.08	0.08
600°C	0.18	0.14	0.12	0.11
800°C	0.27	0.22	0.18	0.16
1000°C	0.42	0.36	0.28	0.21
Tensile Strength (kPa)				
	35	55	75	95

Thermal Conductivity figures are empirical values (average) based on experience.

Tolerances as per ASTM C-892 (2010) or IS 15402 (2003).

Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office.

AVAILABILITY

Thickness (mm)	Density (kg/m³)				Roll Length (m)
	64	96	128	160	
13		✓	✓	✓	7.32
19	✓	✓	✓	✓	7.32
25	✓	✓	✓	✓	7.32
38	✓	✓	✓	✓	4.88
50	✓	✓	✓		3.66

Standard roll width is 610mm. Other thicknesses / sizes may be available on request subject to minimum order requirements. Versions with aluminium foil and other coverings are also available subject to minimum order requirements.

HANDLING INFORMATION

A Material Safety Data Sheet 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.

Supplied by: