

Unifrax Excelfrax® 1800 Board Microporous Insulation

Category : Ceramic , Oxide , Silicon Oxide

Material Notes:

Unifrax Corporation's Excelfrax® product line, based on advanced microporous insulation technology, is a family of products which all exhibit superior insulating characteristics. Excelfrax microporous insulation is composed of inorganic oxides, primarily fumed silica. Silicates and opacifiers are added to improve the material performance. Microporous materials are very efficient insulation products. These products actually have thermal conductivity values lower than still air. Excelfrax 1800 Board is a high-temperature, rigid, microporous material specifically designed for applications where a strong, highly efficient insulating material is required. Excelfrax 1800 Board is available in thicknesses up to 2" and can be field fabricated to meet specific application requirements. Some typical applications for Excelfrax 1800 Board include back-up insulation in high-temperature furnaces (steel, glass, ceramic, aluminum), aluminum launders, and aluminum transfer ladles. Information Provided by Unifrax I LLC

Order this product through the following link:

http://www.lookpolymers.com/polymer_Unifrax-Excelfrax-1800-Board-Microporous-Insulation.php

Physical Properties	Metric	English	Comments
Density	0.231 g/cc	0.00833 lb/in ³	

Mechanical Properties	Metric	English	Comments
Compression Set	2.9 % @Pressure 0.100 MPa	2.9 % @Pressure 14.5 psi	

Thermal Properties	Metric	English	Comments
Specific Heat Capacity	0.800 J/g-°C @Temperature 32.0 - 800 °C	0.191 BTU/lb-°F @Temperature 89.6 - 1470 °F	
Thermal Conductivity	0.0190 W/m-K @Temperature 20.0 °C	0.132 BTU-in/hr-ft ² -°F @Temperature 68.0 °F	DIN 51046
	0.0210 W/m-K @Temperature 200 °C	0.146 BTU-in/hr-ft ² -°F @Temperature 392 °F	DIN 51046
	0.0250 W/m-K @Temperature 400 °C	0.174 BTU-in/hr-ft ² -°F @Temperature 752 °F	DIN 51046
	0.0300 W/m-K @Temperature 600 °C	0.208 BTU-in/hr-ft ² -°F @Temperature 1110 °F	DIN 51046
	0.0380 W/m-K @Temperature 800 °C	0.264 BTU-in/hr-ft ² -°F @Temperature 1470 °F	DIN 51046

Thermal Properties	Temperature, Air	Metric °C	English	Comments Recommended Operating Temperature
Minimum Service Temperature, Air		20.0 °C	68.0 °F	Recommended Operating Temperature
Shrinkage		1.0 %	1.0 %	All sides, long term
		@Temperature 800 °C	@Temperature 1470 °F	
		4.8 %	4.8 %	All sides, long term
		@Temperature 1000 °C	@Temperature 1830 °F	
		0.50 %	0.50 %	Single sided
		@Temperature 1000 °C, Time 43200 sec	@Temperature 1830 °F, Time 12.0 hour	

Component Elements Properties	Metric	English	Comments
SiC	15 %	15 %	
SiO2	80 %	80 %	

Descriptive Properties	Value	Comments
Cold Crushing Strength (MPa)	1.1	DIN 51067 / DIN 53421
Color	Grey	
Other Inorganics (%)	5	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China