

## **Unifrax Fiberfrax® Duraset® Flet**

Category: Ceramic, Oxide, Aluminum Oxide, Silicon Oxide

## **Material Notes:**

Fiberfrax® Lo-Con™ felt and Duraset® flet are unique product forms in the Unifrax Corporation's extensive ceramic fiber product family. Felt products extend the performance of Fiberfrax papers in a product form with lower densities and increased mat thickness. Felt products are compressible but resilient; they conform to irregular surfaces yet have sufficient integrity to hold their shape in gaskets and formed parts. Both felt grades are wet laid, uniform, ceramic fiber mats which have been impregnated with a thermosetting resin. In Lo-Con flet, this resin has been precured to produce a semi-flexible rolled sheet. The binders in Duraset have been left uncured so they can be molded under heat and pressure to retain a complex shape after processing. The organic binders remain functional at low and moderate temperatures (to 650°F); however, the core ceramic fiber materials will provide consistent performance at temperatures well in excess of 2000°F, providing excellent thermal insulation in a wide range of applications. Fiberfax Duraset is a lightweight mat made from spun Fiberfrax ceramic fibers which have been impregnated with a thermosetting resin. Supplied in uncured form, it can be formed with the simultaneous application of pressure and heat to achieve complex shapes of rigid consistency for thermal and acoustical shielding. Use of Fiberfrax spun fibers allows for production of parts with severe draws without tearing during the forming process. Duraset flet is an excellent insulator with a high temperature use limit. If wet by water or steam, thermal and physical properties remain unaffected after drying. Duraset felt is unaffected by most chemicals except hydrofluoric and phosphoric acids and concentrated alkalies. Product AdvantagesFormabilityFlexibilityHigh temperature stabilityLow thermal conductivityLow heat storageWeight reductionThermal shock resistanceHigh heat reflectanceExcellent corrosion resistanceEasy to wrap, shape, and cutTypical ApplicationsAutomotive Exhaust Heat ShieldCommercial Fire Protection ApplicationsAerospace Heat ShieldingInformation Provided by Unifrax I LLC

Order this product through the following link: http://www.lookpolymers.com/polymer\_Unifrax-Fiberfrax-Duraset-Flet.php

Physical Properties	Metric	English	Comments
Specific Gravity	2.73 g/cc	2.73 g/cc	
Density	0.152 g/cc	0.00550 lb/in³	Nominal Core Density
Loss On Ignition	9.0 %	9.0 %	

Thermal Properties	Metric	English	Comments
Melting Point	1760 °C	3200 °F	
Maximum Service Temperature, Air	1260 °C	2300 °F	Recommended Operating Temperature

Component Elements Properties	Metric	English	Comments	
Al203	40 - 45 %	40 - 45 %		
SiO2	50 - 55 %	50 - 55 %		



Processing Properties	Metric	English	Comments
	1.50 - 2.00 min	0.0250 - 0.0333 hour	
Cure Time	@Temperature 204 - 232 °C	@Temperature 400 - 450 °F	

Descriptive Properties	Value	Comments
Color	Yellow/Tan	
Fiber Index (% Wt)	70	
Other Inorganics (%)	<5	
Temperature Grade (°C)	1260	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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