



Product Bulletin

Product Description

JFOAM™ BX-450

JFoam™ BX-450 is a two component, water blown polyurethane modified polyisocyanurate foam designed for structural core applications. BX-450 exhibits excellent high temperature properties and can operate continuously at temperatures up to 350°F.

Typical Component Properties

	T Component Polymeric MDI	R Component Polyol Blend
Viscosity at 77°F (25°C), cps	200	1,350
Mixing Ratio (% by weight)	70	30

Typical Physical Properties

	75°F	250°F	350°F
Density ASTM D-1622			
Free Rise.....	4.50	4.50	4.50
Molded Core, pcf.....	9.82	10.07	9.96
Compression Strength, ASTM D-1621			
Parallel, psi.....	347	228	173
Perpendicular, psi.....	364	205	150
Compressive Modulus ASTM D-1621			
Parallel.....	6001	4436	2033
Perpendicular.....	5213	3358	2798
Tensile Strength ASTM D-1623, psi			
Parallel.....	253	181	116
Perpendicular.....	231	170	125
Shear Strength, ASTM D-732			
Parallel, psi.....	172	181	189
Perpendicular, psi.....	186	158	204
K.Factor, ASTM C-518, BTU in/hr ft ² °F.....	0.315		
Water Absorption, ASTM D-2842			
Lbs/ft ²029		
%.....	1.62		
Dimensional Stability, ASTM D-2126		% Change in Volume	
28 days @ -20°F		0.43	
28 days @ 158°F		0.42	
28 days @ 350°F		16.96	
28 days @ 158°F/100% R.H		0.28	

Processing Parameters

Condition both components to 77°F. Carefully blend T component into R component. Mix for 12 seconds with a high speed drill motor (3,500 rpm). Pour contents into a mold preheated to 105-125°F. Mold to 8 pcf or higher. For optimum high heat stability, post cure part in mold at 200°F for two hours or 25°F in excess of the maximum anticipated service temperature, not to exceed 375°F. Cool mold below 100°F before demolding part

Storage

Avoid moisture contamination during storage, handling, and processing. Store the polyol and isocyanate components from 65°F to 85°F. Do not expose isocyanate component to lower temperatures as freezing may occur.

Shelf Life

The shelf life is 12 months if stored in original unopened containers.

Health and Safety Information

Safety Data Sheets are available which provide information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read and become familiar with the available information on the risks involved, proper use, and handling.

All polyurethane foam burns in varying degrees, which in turn liberates toxic gases; the foam should be evaluated in its final form for compliance to existing standards in your industry. Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of the manufacturer or others. The information contained herein is based on the manufacturer's own study and the works of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information.

J6 Polymers LLC
601 Derby Line Rd
Genoa, IL 60135 USA
Tel: (815) 517-1173
Fax: (815) 517-0781
customerservice@j6polymers.com
www.J6polymers.com

