



POLY-U-FOAM TECHNICAL SHEET

Poly-U-Foam is a rigid 2 component urethane foam system, utilizing water and HFC245fa as blowing agents. This system meets the requirements for UL®94V- (file # E112987).

Resin Component

Appearance:	Amber Liquid
Odor:	Slight Amine
Density @ 73°F:	9.09 lbs/gal
Resin Viscosity @ 75°F:	900 cps
Flash Point, ASTM 3278-89	> 93°F

Isocyanate Component

Appearance:	Dark Brown Liquid
Odor:	Slight Aromatic
Density @ 77°F:	10.2 lbs/gal
Viscosity @ 77°F:	200 cps
Flash Point:	> 400°F
Vapor Pressure @ 20°C	0.00016 mm/Hg

Mix Ratio **1:1**

Handmix Reactivity

Component Temps, Resin/Isocyanate	60°F/73°F
Mix Time (jiffy mixer @ 1720 rpm)	10 seconds
Cream Time	41 seconds
Gel Time	128 seconds
Tack Free Time	243 seconds
Free Rise Density, #5 cup	6.0 pcf

Typical Physical Properties

Molded Panel, pcf	8.4
Core Density, pcf	7.8
Perpendicular	
Compressive Strength @ 10%	
Deflection, psi	147
Compressive Modulus, psi	3930
Tensile Strength, psi	118
Elongation, %	4
Tensile Modulus, psi	3246
Flexural Strength, psi	
Flexural Modulus, psi	7030
Closed Cells, % (uncorrected)	
CLTE	79
Shore D Hardness	78

Dimensional Stability, % Volume Change

158°F	
28 days	-3.0
158/100% RH	
28 days	-0.3
-20°F	
7 days	-1.2
200°F	
28 days	-2.7

Certification**US Coast Guard: (CGD 75-168) Flotation Material**

Rigid polyurethane samples prepared from Poly-U-Foam chemicals have been tested at an independent laboratory. Molded samples have passed the U.S. Coast Guard immersion tests (CDG 75-168), and meet or exceed performance criteria set out in D.O.T. – Coast Guard – Flotation Materials, Par. 183.114, Federal Regulations Volume 43, Np. 233, 1/5/2005

US Coast Guard: (CITE: 33CFR183.516) Encase Fuel Tanks

Rigid polyurethane foam samples has been tested by an independent laboratory. Molded samples have passed the ASTM D-471 and military specification MIL P-21929B sections of 33CFR183.516. 12-23-2005.

POLY-U-FOAM TECH TIPS

Coverage per Kit (A & B)

1 quart kit will cover 2 cubic feet

1 gallon kit will cover 8 cubic feet

1 5-gallon kit will cover 50 cubic feet

Mixing of Foam

Parts A & B must equal about 77° F when mixed together.

Part A	90° F
Part B	64° F
Mixed	77° F

Mix in a 1:1 ratio with a jiffy mixer at 1720 rpm for about 30 seconds.

1 lb of expanded foam will support 50-60 lbs of weight

Water absorption, 10' head @ 77° F for 14 days

2 sq. ft. of surface area: water absorption was .08 lbs on surface only.

Salt water does NOT harm foam.

Foam must be covered by wood or fiberglass to support weight from walking on it or boats bumping into it.

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