



International Polyurethane Systems

P.O. Box 3309  
5590 - 46th Ave. SE  
Salmon Arm, B.C.  
V1E 4S1 Canada

Tel: (250) 832-5142  
Fax: (250) 832-9338  
[sales@ipsinc.com](mailto:sales@ipsinc.com)  
[www.ipsinc.com](http://www.ipsinc.com)

## RIGID FOAM RF2010/8 MATERIAL DATA SHEET

### PRODUCT DESCRIPTION

RF2010/8 is a 2.5 ft/lb density, closed-cell, structural rigid foam system that is formulated for use in applications requiring foams with high load bearing properties. This system has been designed for concrete lifting, void filling, among others. As with any product, use of this system must be tested in advance by the user to determine suitability. This foam needs to be applied by high pressure two component mix equipment.

### TECHNICAL DATA

#### Chemical Properties

Properties	Unit	Test Method	Typical Values		
			Polyol	Isocyanate	Mixture
Appearance			amber	dark brown	brown
Density	g/cm <sup>3</sup>	ASTM-D 1475	1.03	1.21	1.10
Viscosity @ 25°C (Brookfield DV-2+ @ 20RPM Spindle 3)	cP	ASTM-D 4878	1950	28	1000
Flash Point	°C		>200	>200	>200
Mixing Ratio @ 22°C	by weight		100	122	
Mixing Ratio @ 22°C	by volume		100	100	
Cream Time @ 22°C	s				5-8
Rise Time @ 22°C	s				20
Free-rise Density	lb/ft <sup>3</sup>	ASTM-D 3574			2 - 3

### Applications

- Lifting
- Void Fill
- Undersealing
- Soil Stabilization
- Containment

### Physical Properties

- Free Rise Density 2.5lbs/ft<sup>3</sup>
- Compressive Density 6.0lbs/ft<sup>3</sup>
- Free Rise Strength 5080lb/sq.ft.
- Compressive Strength 17250lb/sq.ft.
- Tensile Strength Free Rise 6400lb/sq.ft.
- Tensile Strength Compressive 15000lb/sq.ft.
- Shrinkage None ASTM D-1042/D-756
- Reaction Time 5 seconds
- Rise Time 20 seconds
- Tack Free 40 seconds
- Full strength 35 minutes
- Resistance to Mold/Mildew Excellent

- Resistance to Solvents Excellent
- Water Absorption ( ASTM D570) <0.04
- Closed Cell Content >93%
- Max Service Temperature 200 degrees F.
- Cured Material is environmentally safe

### **Typical Lifting and Fill Usages**

- Residential Industrial Commercial
- Floors, Slabs, Stairs, Footings.
- Precision Lifting of Walls and Foundations
- Highways and Bridge approach Slabs
- Infrastructure including Manholes, Vaults, Pipes
- Runways and Taxiways
- Setting Poles and posts
- Mining Industry

### **APPLICATION/DIRECTIONS**

Pre-heat Part B polyol for 1-2 hours if temp is less than 22 C.  
Mix well for at least 30-60 minutes to ensure even reactivity of the system.  
Set initial machine temps at 140F, both sides.  
Pressures- 1200-1600 psi using Graco AR4242 chamber in Fusion AP gun.  
Drum pumps: 2.5:1.

### **STORAGE/SHELF LIFE**

Material should be stored in a tightly closed container. Keep in a cool, dry, and well ventilated place. Keep away from incompatible materials. Avoid contact with water or moist air. Keep at a temperature between 20-25°C (75-77°F) for quality reasons. This product has a shelf life of approximately 6 months.

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