

## Technical Bulletin

### EARTHANE

#### POLYURETHANE RESIN

#### Patented Water Blown Spray Foam System

**DESCRIPTION:** Sprayable resin system for rigid, closed-cell, low k-factor urethane foams. Designed especially for applications with two-component spray equipment capable of handling material with short reaction time.

- FEATURES:**
- R-6.5 per inch
  - Excellent cold weather application performance
  - Excellent compatibility of components—B component stays in suspension
  - Fine uniform cell structure with good strength and dimensional stability

**APPLICATIONS:** Thermal insulation for building construction, roofing, siding, floors, wall cavities... new or retrofit. EARTHANE is also suitable to insulate tanks, vessels, piping, cold or wherever a 1.8 to 3 pound density superior insulation is required.

### Typical Physical Characteristics of The Foam:

PROPERTY	1.8	2.1	3.0
DENSITY, PCF-SPRAYED	1.7-1.8	1.9-2.1	2.9-3.2
K FACTOR-AGED (B.T.U IN/FT <sup>2</sup> •HR•°F)	0.166	0.168	0.169
COMPRESSIVE STRENGTH	25 psi	28 psi	48 psi
SHEAR STRENGTH	22 psi	24 psi	39 psi
WATER VAPOR TRANSMISSION (PERMS/INCH)	2.5	2.8	2.0
HUMID AGING, 158°F/98% RH, ONE WEEK			
Volume change	-2.65	-2.6	-1.67
Weight change	-1.15	+1.1	+0.75

continued 

## Reactivity Characteristics (Laboratory Analysis):

	Winter	Regular	Summer
<b>CREAM TIME</b>	2-3 seconds	3-5 seconds	5-7 seconds
<b>RISE TIME</b>	6-10 seconds	10-18 seconds	18-24 seconds
<b>TACK FREE</b>	12-15 minutes	14-16 minutes	16-18 minutes
<b>CURE TIME</b>	4 hours	3-5 seconds	4 hours

## Liquid Component Properties:

Property	PREPOLYMER	RESIN
<b>COLOR</b>	Dark Brown	Dark Amber/Dark Brown
<b>SPECIFIC GRAVITY</b>	1.27	1.08
<b>WEIGHT PER GALLON</b>	10.5 lb	11.0 lb
<b>VISCOSITY-BROOKFIELD</b>	300 cps	350-450 cps
<b>MIXING RATIO BY VOLUME</b>	100	100

## Fire Hazard\* Classification (ASTM-E84)(ANSI 2.5)(NFPA 255)(UL-723):

FOAM THICKNESS	FLAME SPREAD	SMOKE DEVELOPED
Nominal 2 inch	20	425

*\* This numerical flame spread rating and all other test data are not intended to reflect hazards presented by this or any other material under actual fire conditions.*

**WARNING:** Polyurethane products manufactured or produced from these chemicals may present a serious fire hazard if improperly used or allowed to remain exposed or unprotected. The character and magnitude of any such hazard will depend upon a broad range of factors which are controlled or influenced by the manufacturer, applicator, or production process by the mode of application or installation and usage of the particular end product. Each person, firm, or corporation engaged in the manufacture, production, application, installation, or use of any polyurethane materials should carefully determine whether there is a potential fire hazard associated with such product in a specific usage, and utilize all appropriate precautionary and safety measures as outlined in local, state, and federal regulations governing the manufacture of products in the construction and/or renovation of commercial or residential structures. The information herein is to assist customers in determining whether our products are suitable for their applications.

Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. We warrant that our products will meet our written specifications. Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness. Nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental, or consequential damages.