

TECHNICAL DATA SHEET

Geolok™ is a two component, spray applied, rigid polyurethane foam system specifically designed for applications requiring a high volume of foam build-up with low heat generation and no thermal scorching or splitting problems. This generation of ditch foam contains raw materials made from recycled PET plastic, renewable materials such as soya oil and glycerin and uses a zero ozone depletion potential (ODP) blowing agent.

Common uses: Pipeline support, trench work, ditch work, breakers, pipe pillows, rock guards, erosion control, filling voids, mine shafts, sinkholes, underground storage tanks, etc.

PHYSICAL PROPERTIES			
ASTM D 1622	Density	2.05 ± 0.5 lb/ft ³	33.31 kg/m ³
ASTM C 518	Aged Thermal Resistance (1 day @ 23°C)	7.36 ft ² h°F/BTU	1.3 Km ² /W
ASTM D 1621	Compressive Strength	23 psi	158 kPa
ASTM D 2126	Dimensional Stability, 7 Days (% volume change of 5"x5"x4" specimen)		
	176°F (80°C), ambient R.H.	2.7%	
	158°F (70°C), > 97.3% R.H.	8.5%	
	-4°F (-20°C), ambient R.H.	-0.28%	
ASTM D 2842	Water Absorption (% volume, 96 hrs immersion)	0.7%	
ASTM D 2856	Closed Cell Content	> 92%	
FMVSS-302	Flammability of Materials	Self Extinguishing	

LIQUID COMPONENT PROPERTIES*		
PROPERTY	A-PMDI ISOCYANATE	GEOLOK RESIN
Color	Brown	Green/Blue
Viscosity @ 77°F (25°C)	180 - 220 cps	170 - 270 cps
Specific Gravity	1.24	1.20 - 1.22
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50 - 100°F (10 - 38°C)	50 - 85°F (10 - 29°C)
Vapor Pressure @ 77°F (25°C)	< 0.0001 mmHg (MDI)	9.6 psi
Mixing Ratio (volume)	1:1	1:1

*See SDS for more information.

RECOMMENDED PROCESSING CONDITIONS*		
Initial Primary Heater Setpoint Temperature	102°F	39°C
Initial Hose Heat Setpoint Temperature	102°F	39°C
Initial Processing Setpoint Pressure	700 psi	4827 kPa
Substrate & Ambient Temperature	41 - 95°F	5 - 35°C

*Foam application temperatures and pressures can vary widely depending on temperature, humidity, elevation, substrate, equipment and other factors. While processing, the applicator must continuously observe the characteristics of the sprayed foam and adjust processing temperatures and pressures to maintain proper cell structure, adhesion, cohesion and general foam quality. It is the sole responsibility of the applicator to process and apply Geolok within specification.

REACTIVITY PROFILE			
Cream Time	Gel Time	Tack Free Time	End of Rise
0+ seconds	4 - 5 seconds	6 - 7 seconds	6 - 7 seconds

General Requirements: Equipment must be capable of delivering the proper ratio (1:1 by volume) of polymeric isocyanate (PMDI) and polyol blend at adequate temperatures and spray pressures. Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the polyurethane foam.

Geolok has a maximum thickness per pass of 4" with no wait time between passes; therefore the product can be continuously sprayed from side to side with consecutive 4" passes to achieve the final desired thickness. Geolok is not intended for use in buildings. Geolok should not be used when the continuous service temperature of the substrate or foam is below -76°F or above 176°F.

Disclaimer: The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.