

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 ± 1 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.

GEOLOK

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.

