



Earth Contact Products
 15612 S Keeler Terrace
 Olathe, KS 66062
 (800) 327-0007

P2-070

Technical Data Sheet

TERRATHANE™ Polyurethanes

TerraThane™ Polyurethanes by NCFI are uniquely formulated for a variety of geotechnical applications. Each batch goes through stringent testing and quality assurance standards to ensure reliability in the field.

About 24-070

NCFI 24-070 is a two-component, HFO blown, low GWP, all PMDI based, pour-in-place urethane rigid foam system. 24-070 is a low-exotherm system with slow reactivity for greater flow. The system is ideal for filling large void areas, pipe abandonment, and underground tank abandonment.

24-070 APPLICATIONS

- Low to Extreme Void Filling
- Pipe Abandonment
- Underground Tank Abandonment
- Cavity Filling

Reactivity at 110°

Cream Time	12 seconds
Gel Time	150 Seconds
Tack Free Time	250 seconds
Rise Time	340 seconds

Physical Properties

Physical Properties	Test Method	Free Rise
Density	ASTM D1622	2.1 pcf
Compressive Strength	ASTM D1621	30.9 psi
Compressive Modulus	ASTM D1621	744 psi
Tensile Strength	ASTM D1623	52.0 psi
Tensile Modulus	ASTM D1623	86 psi
Water Absorption	ASTM D2842	≤ 0.044 lbs/ft ²
Closed Cell Content		>90%
Max Service Temp		200°
Elongation	ASTM D1623	6.0%
Shear Strength	ASTM C273	30.8 psi
Shear Modulus	ASTM C273	200 psi
Flexural Strength	ASTM D790	30.7 psi
Flexural Modulus	ASTM D790	579 psi



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Special Testing/Certifications

Flammability	FMVSS-302 FAR 25.853a(iii) UL-94 HBDF	Pass
		Pass
		Pass
USGC Title 33, Chapter 1, Part 183		Pass
Initial K-Factor		0.167
Moisture Vapor Transmission		2-3 perm inch
Overall Mold Density		3.2 pcf

Performance

Wet Environments... **Fair**

Lifting Capacity... **Fair**

Chemical Resistance

Solvents... **Excellent**

Mold and Mildew... **Excellent**

Component Properties

Component	B-24-070	A2-000
Appearance	Brown Liquid	Clear Brown Liquid
Brookfield Viscosity @ 20rpm	450 cps at 72°	200 cps at 72°
Specific Gravity	1.13	1.24
Weight per Gallon	9.4 lbs	10.3 lbs
Storage Temperature	40° - 90°F	40° - 90°F

Processing Parameters

ISO Temperature	90° - 130°F
Poly Temperature	90° - 130°F
Mixing Pressure	800 psi static, 600 psi dynamic, 1000/800 preferred

Mix Ratio

By weight... 100 parts poly : 112 parts iso

By volume... 100 parts poly : 100 parts iso

Storage and Handling

Store the poly from 65°F to 85°F. Avoid moisture contamination during storage, handling, and processing. For both components, pad containers and day tanks with either nitrogen or dry air (desiccant cartridge or air dryer @ -40°F dew point). For optimum shelf life, the recommended storage temperature for iso is 50°F to 110°F. **Do not expose iso to lower temperatures – freezing may occur.** Store components at 70°F to 90°F for several days prior to use to minimize components being too viscous at time to take to field. Shelf life is 6 months for factory sealed containers.

Application Cautions

Careful consideration should be given to selection and application of any NCFI Polyurethane foam system where excessive foam mass build-up can occur. Excessive polyurethane foam lift thickness will result in high internal temperatures within the injected foam, which can result in degraded foam properties, or in extreme cases, fire or spontaneous combustion. **Any flammability rating contained in this literature is not intended to reflect hazards presented by this or any other material under actual fire conditions.** Each person, firm or corporation engaged in the application, installation or use of any polyurethane product 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. Please consult NCFI Polyurethanes for safety considerations, polyurethane system selection and application recommendations.

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Version: 3.11.20