



TERRATHANE™ 24-060

Technical Data Sheet

TERRATHANE™ Product Line

The TerraThane™ product line is comprised of uniquely formulated, dual-component systems designed for a variety of geotechnical applications, such as lifting, soil compaction, void filling, and I/I mitigation. Each batch goes through stringent testing and quality assurance standards to ensure reliability in the field.

APPLICATIONS

Pipe Insulation

TERRATHANE™ 24-060

TerraThane™ 24-060 is a two component, HFO blown, polyether-based low density spray urethane foam system designed for high temperature insulating applications where exposure temperatures exceed capabilities of typical urethane foam systems. NCFI 24-060 is designed to tolerate limited exposure to temperatures as high as 300°F.

UNIQUE ADVANTAGES

No change in performance at high temperatures

Cont. Service Temp of 275°F

Reactivity at 130°F

Cream Time	1 – 2 seconds
Tack Free Time	5 seconds
Rise Time	6 seconds

Chemical Resistance

Solvents... **Excellent**

Mold and Mildew... **Excellent**

Performance

Wet Environments... **Poor**

Lifting Capacity... **Poor**

Physical Properties

Physical Properties	Test Method	Free Rise
Density	ASTM D1622	3 pcf
Compressive Strength	ASTM D1621	55 psi
Compressive Modulus	ASTM D1621	1800 psi
Tensile Strength	ASTM D1623	80 psi
Tensile Modulus	ASTM D1623	1397 psi
Water Absorption	ASTM D2842	≤0.06 lbs/ft ²
Closed Cell Content	ASTM D6226	>90%
Max Service Temp		300°F
Elongation	ASTM D1623	5.1%
Shear Strength	ASTM C273	62 psi
Shear Modulus	ASTM C273	6,083 psi
Pull Off Strength – PEX, Dry	ASTM D4541	169 psi
Pull Off Strength – PEX, Wet	ASTM D4541	145 psi

Special Testing

R-Value	6.682 ft ² h°F/Btu in
Thermal Analysis, DMA:	Glass Transition Temp 172°C

Dimensional Stability, % volume change, 28 days aging (ASTM D-2126)	Heat age at 158°F
	-4.9%

Component Properties

Component	B-24-060	A2-000
Appearance	Transparent Liquid	Clear Brown Liquid
Brookfield Viscosity @20rpm	660 cps at 72°F	250 cps at 72°F
Specific Gravity	1.159	1.24
Weight per Gallon	9.67 lbs	10.3 lbs
Storage Temperature	50-100°F	50-100°F

Mix Ratio

By weight... 117 parts A-side: 100 parts B-side

By volume... 100 parts A-side: 100 parts B-side

Processing Parameters

A-side Temperatures	110 – 130°F
B-side Temperatures	110 – 130°F
Mixing Pressure	1000 psi static 800 psi dynamic

Storage and Handling

For optimum shelf life, the recommended storage temperature is 50°F to 100°F. **Do not expose A-side to lower temperatures – freezing may occur.** Avoid moisture contamination during storage, handling, and processing. After opening, pad the containers and day tanks with either nitrogen or dry air (desiccant cartridge or air dryer @ -40°F dew point).

Store components at 70°F to 90°F for several days prior to use to minimize viscosity issues.

Shelf life of B-side is 6 months and A-side is 2 years 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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