



STRATA-FIL™ 24-028

Technical Data Sheet

Strata-Fil Polyurethanes

Strata-Fil™ Polyurethanes by NCFI are uniquely formulated, plural-component, low-exotherm systems designed for a variety of geotechnical applications, such as void filling, structural forming, and cavity filling. Each batch goes through stringent testing and quality assurance standards to ensure reliability in the field.

APPLICATIONS

**Masonry Cavity Wall Fill
Void & Cavity Filling**

About STRATA-FIL™ 24-028

NCFI 24-028 is a two-component, HFO blown, all MDI-based, nominal 2.0 pcf density, pour-in-place polyurethane foam system designed for Masonry Cavity Wall Fill. It could also be used as a void fill product for a variety of projects. NCFI 24-028 has low component viscosities making the system suitable for either mechanical mix machines, high pressure (over 600 psi) impingement mixing machines or for hand mixing.

UNIQUE ADVANTAGES

**Mechanical Mix Machines
Meets ASTM E-84 Test Criteria
Excellent Flow
Contains No Solvents**

REACTIVITY AT 72°F

Cream Time	23 seconds
Gel Time	140 seconds
Tack Free Time	190 seconds
Rise Time	225 seconds

Chemical Resistance

Solvents... **Excellent**

Mold and Mildew... **Excellent**

Physical Properties

Physical Properties	Test Method	Free Rise
Density	ASTM D1622	2.0 pcf
Compressive Strength Parallel	ASTM D1621	25 psi
Compressive Strength Perpendicular	ASTM D1621	14 psi
Initial k-Factor	ASTM C-518	0.16 Btu·in/(hr·ft ² ·°F)
Closed Cell Content	ASTM D6226	>92%
Max Service Temp		180°F

Special Testing

Flammability (ASTM E-84)		Flame Spread Index: 25 Smoke Index: 250	
Dimensional Stability, % volume change, 28 days aging (ASTM D-2126)	Heat age at 200°F	Freezer at -20°F	Humid age at 100% RH & 158°F
	+8.2%	-0.1%	+11.9%

Component Properties

Component	B-24-028	A2-000
Appearance	Clear Amber Liquid	Clear Brown Liquid
Brookfield Viscosity @20rpm	940 cps at 72°F	200 cps at 72°F
Specific Gravity	1.23	1.24
Weight per Gallon	10.26 lbs	10.3 lbs
Storage Temperature	50 – 100°F	50 – 100°F

Mix Ratio

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

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

Processing Parameters

ISO Temperature	75 – 85 °F
Poly Temperature	70 – 85 °F
Mixing Pressure	800 – 1200 psi

Storage and Handling

Store the poly from 50°F to 100°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 of Resin is 6 months and ISO 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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