



NCFI Polyurethanes

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24-010 Rigid Foam System

Technical Data Sheet

NCFI 24-010 is a two component, water blown, all PMDI based low density spray polyurethane foam system designed for concrete jacking and leveling, soil stabilization and void filling. NCFI 24-010 is dispensed using 1/1 by volume ratio equipment. It is available in multiple speeds for various seasons, climates and applications.

Typical Properties of Components

Component	R-24-010	A-24-010
Appearance	clear amber liquid	clear brown liquid
Brookfield Viscosity @ 20 rpm	600 cps at 72°F	200 cps at 72°F
Specific Gravity	1.08	1.24
Weight per Gallon, lbs	8.9	10.3
Storage Temperature	60°F - 90°F	60°F- 90°F

Mix Ratio

By weight..... 100 parts poly : 116 parts iso

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

Typical Properties of Machine-Mixed System at 130°F

Cream Time	5 seconds
Tack Free Time	10 seconds
Free Rise Core Density	2.8 pcf

Typical Processing Parameters*

Iso Temperature	110°F to 140°F
Poly Temperature	110°F to 140°F
Mixing Pressures	1000 psi static, 800 psi dynamic

* Using standard spray equipment with 1/1 by volume proportioning pumps capable of maintaining 800-1200 psi dynamic pressures. The Graco Reactor E20-series or better with a GX-7 gun is preferred equipment. NCFI 24-010 R is connected to the **resin/polyol** pump with the NCFI A being connected to the **isocyanate** pump.

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Typical Physical Properties:

Density, pcf	ASTM D1622	2.8
Compressive Strength, psi	ASTM D1621	38
Compressive Modulus, psi	ASTM D1621	1320
Tensile Strength, psi	ASTM D1623	46
Shear Strength, psi	ASTM C273	28
Flexural Strength, psi	ASTM D790	119
Flexural Modulus, psi	ASTM D790	4252
Closed Cell Content, %	NCFI TM 300	> 90
Water Absorption, lbs./ft ²	ASTM D2842	≤ 0.08
Resistance to Solvents		Excellent
Resistance to Mold and Mildew		Excellent
Maximum Service Temperature		180° F

Storage and Handling

Store the poly from 50°F to 90°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 90°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.