

Material Characteristics

NCFI-120 is a low viscosity single component hydrophobic prepolymer used for increasing the load bearing capacity of loosely bound soils, filling voids and I/I mitigation. Ideal for stopping active or flowing water leaks and eliminating water seepage through cracks in stationary concrete structures and assets. Depending on the application, NCFI-120 can be on its own or paired with B-24-NCFI-CR OR B-24-NCFI-CF.

Applications

Soil Stabilization/Permeation Grouting
Storm & Sanitary Infrastructure
Seawalls
Manholes
Curtain Grouting
Tunnels and Subgrade Utility Assets
Basements/Foundations

Unique Advantages

Single Component Pumping
Low-Viscosity
Controlled Reaction Times
Exceptional Strength Properties

Physical Properties

Physical Properties	Test Method	Medium	Results
Density	ASTM D1622	Fine Sand	55 pcf
Compressive Strength	ASTM D1621	Fine Sand	2490 psi
Compressive Modulus	ASTM D1621	Fine Sand	1370 psi
Tensile Strength	ASTM D1623	Fine Sand	130 psi
Shear Strength	ASTM D273	Fine Sand	550 psi
Shear Modulus		Fine Sand	<4.0%

Component Properties

Component	A-NCFI-120	B-24-NCFI 120 CR/CF
Brookfield Viscosity @72°F	65 - 75 cps	10 - 20 cps
Specific Gravity	1.10	0.9
Weight per Gallon	9.81 lbs	7.51 lbs
Appearance	Light Brown Color	Transparent Yellow
Shelf Life	6 months	6 months

Regular Catalyst (CR) Reaction Properties

Weight % Activator	Activator/Gal	Cream (sec)	Gel (sec)	Rise (sec)
0.5	0.06 oz	22	128	240
1.0	1.3 oz	20	123	180
4.0	5.0 oz	17	96	100
10.0	12.5 oz	3	42	60

Fast Catalyst (CF) Reaction Properties

Weight % Activator	Activator/Gal	Cream (sec)	Gel (sec)	Rise (sec)
0.5	0.06 oz	8	30	50
1.0	1.3 oz	7	22	36
4.0	5.0 oz	6	11	20

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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