

TERRALOK[™] 24-120 Technical Data Sheet

TERRA-LOK Polyurethanes

NCFI TERRA-LOK[™] polyurethane systems are a suite of low viscosity single component prepolymers designed for soil stabilization or permeation grouting. Ideally suited to stabilize or lock soils prior to excavation and curtain grouting.

About **TERRALOK**[®] 24-120

Terra-Lok[™] 24-120 is a low viscosity single component hydrophobic polymer 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. Based on the application, Terra-Lok[™] 24-120 requires the use of REG CAT or FAST CAT catalyst.

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 Variable Reaction Times Excellent Chemical Resistance Exceptional Strength Properties

Physical Properties

Physical Properties	Test Method	Medium	Results
Density	ASTM D1622	Fine Sand	55 pcf
Compressive Strength @ 10%	ASTM D1621	Fine Sand	2490 psi
Compressive Modulus @Max	ASTM D1621	Fine Sand	1370 psi
Tensile Strength	ASTM D1623	Fine Sand	130 psi
Shear Strength	ASTM D273	Fine Sand	550 psi
Expansion		Fine Sand	Up to 40x or 4,000%

Component Properties

Component	24-120	24-120 Activator	
Brookfield Viscosity @72ºF	120 cps	10 cps	
Specific Gravity	1.12	0.9	
Weight per Gallon	9.35 lbs	7.51 lbs	
Appearance	Light Brown Color	Transparent Yellow	
Shelf Life	6 Months	6 Months	





Regular Catalyst Reaction Properties

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

Fast Catalyst Reaction Properties

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

Storage and Handling

Keep temperature of chemicals at 70°F for several days before use. Cold chemicals can cause poor mixing, pump cavitation or other process problems due to higher viscosity at lower temperatures. Absolutely no thinners should be added to this 100% solids system. Viscosity can be reduced by an increase in temperature. The 'A' component is sensitive to exposure to moisture. Keep drums tightly closed when not in use and under nitrogen pressure of 2 -3 psi after they have been opened. Prolonged exposure to temperatures below 50°F can cause the 'A' component to freeze. Do not store in direct sunlight.

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.

The Information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained there from. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the sole responsibility of the user. NCFI Polyurethanes shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond NCFI's direct control. NCFI MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANT ABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

NCFI Polyurethanes – Geotechnical Division • P.O. Box 1528 • Mount Airy, NC 27030 800-346-8229 • www.ncfigeo.com