Rhino Foam™
BUILDING SOLUTIONS

GeoTech™ CC2TB Data Sheet

PART NUMBER: GT2.0TBLE SET

DESCRIPTION: GeoTech™ CC2TB is a closed-celled, water-blown spray polyurethane foam (SPF) system designed for exterior trench breaker and geotechnical applications that require high compressive strength and low exothermic reaction temperatures. GeoTech CC2TB is applied as a liquid and then expands in seconds. GeoTech CC2TB exhibits low exothermic reaction temperature and therefore can be applied in a single continuous lift without danger of charring or ignition. GeoTech CC2TB utilizes advanced, proprietary chemistry that lowers the exothermic reaction temperature of the product during installation and allows the foam to build up on itself during a`continuous-lift installation without excessive pooling or blowback.

FEATURES AND BENEFITS:
- No ozone depleting substances, HFCs, PBDEs
- Low odor during application and produces no toxic vapors after application

TYPICAL USES:
- Exterior trench breaker
- Soil stabilization
- Geotechnical applications

CHEMICAL PROPERTIES:		**Isocyanate (A)**	**Resin (B)**
Specific Gravity (grams/cc)	ASTM D-1475	1.23	1.18
Viscosity (cps)	ASTM D-2196	200 – 250	1100 – 1300
Mix Ratio, Parts per Volume		1	1
Cream Time (seconds) @ 77°F (25°C)		3 – 5	
Rise Time (seconds) @ 77°F (25°C)		8 – 14	
Shelf Life - Unopened Containers		6 months	6 months

TYPICAL PHYSICAL PROPERTIES:	**Test**	**Result**
Density (nominal):	ASTM D-1622	2.2 ± 0.2 lb/ft3 (35 kg/m3)
Tensile Strength (psi)	ASTM D-1623	71 ± 7
Compressive Strength (psi)	ASTM D-1621	40 ± 3
Closed-Cell Content (%)	ASTM D-2856	>96
Water Vapor Permeability* (perm) @ 2" (51 mm)	ASTM E-96	.9
Air Leakage** (L/s/m2 @ 75 Pa @ 1")	ASTM E-283	0.003
Fungus Growth	ASTM G-21	None
Dimensional Stability (%)	ASTM D-2126	<2Δ
Fire Rating*	ASTM E-84	Class I (non-rated)
Flame Spread Index	ASTM E-84	≤25
Smoke Development Index	ASTM E-84	≤450
R-Value:	ASTM C-518	5.5/inch

*Combustion properties are the result of internal testing and are not the result of an audited third party testing.

PROCESS TEMPERATURE AND ENVIRONMENT CONDITIONS: GeoTech CC2TB must be spray-applied using approved equipment. The system settings required to achieve quality spray foam application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum foam quality.

Processing Temperatures

Iso (A) & Resin (B) Components	**Processing Pressure**	**Ambient Temperature**
115 – 150° F (46.1 – 65.6° C)	900 – 1500 psi	20 – 105° F (-6.7 – 40.6° C)
Substrate Temperature	**Substrate Moisture Content**	
>35° F (1.7° C)	<19%	

PREPARATION OF SUBSTRATES

Providing the proper substrate is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. It is recommended to remove dust, dirt, oil, paint, and alternative polymers from all surfaces prior to applying ***See SPFA guidelines for further details on substrate prep.**

Preconditioning

1. The contents will Not be under pressure. GeoTech CC2TB is a closed-celled, water-blown spray polyurethane.
2. It is recommended to storage precondition material between (50-90F) prior to application. Material may thicken at lower temperatures which can cavitate pumps.

GeoTech CC2TB resin (B) does not require agitation. If necessary, pre-heat and/or recirculate resin (B) up to 100°F (40°C) without any degradation or loss of blowing agent.

Mixing

3. **Does not require agitation**
4. **Can recirculate**

The system settings required to achieve quality spray foam application will vary depending on environmental and substrate conditions.

Pressure Settings

5. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000 psi dynamic pressure.
6. Static pressure should be set between 1000-1500 psi.
7. Dynamic pressure typically operates at a minimum of 1000psi.

Temperature Settings

8. Primary heaters and hose heaters are typically set between (115-150F).
9. Proper application temperature setting is the responsibility of the end user. Equipment temperature varies and can be dependent on equipment, hose length, elevation, ambient temperature, substrate temperature, humidity, and other factors.

APPLICATION

1. Clean surfaces according to "Preparation of Substrates" section.
2. If priming, follow manufacturer recommendations. Ensure primer is adequately cured prior to application.
3. Substrate temperatures should be >35° F (1.7° C)
4. Flush an adequate amount of material through the lines/gun prior to spraying desired surface when changing between systems. Flush amount will be dependent on prior system used.
5. It can be applied in a single continuous application without danger of charring or ignition.
6. Inspect applied material intermittently to ensure no problems exist. If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).

SUBSTRATES: GeoTech CC2TB is chemically and physically compatible with all common building materials including electrical wiring, wood, metal, concrete, plastic (PVC), copper, vinyl, and glass.

CLEANING AND MAINTENANCE

Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer's maintenance procedures for more details.

Contact Rhino Linings Technical Services for long-term equipment storage recommendations.

HOW SUPPLIED: GeoTech CC2TB (Part #: GTCC2TB SET) net weight per set is 1000 pounds (453.6 kg). A set of GeoTech CC2TB consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component.

STORAGE: GeoTech CC2TB should be stored between 50 – 90°F (10 – 32.2°C) out of direct sunlight. Do not allow material to freeze.

SAFETY PRECAUTIONS Health Considerations: Consult the Rhino Linings® Safety Data Sheet (SDS).

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings product SDS for detailed information and handling guidelines.

For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage, and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to end users and processors.

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Contact Rhino Linings Technical Support at (800) 747-6966 for additional questions.