



TYFO® U

Polyurethane Finish Coat

DESCRIPTION

The Tyfo® U is a high-solids, high-build, polyurethane coating with excellent durability properties including abrasion and impact resistance, chemical and stain resistance, UV and weather resistance. Tyfo® U is applied over the Tyfo® systems for additional protection for industrial applications. Tyfo® U complies with AIM regulations for VOC content of industrial maintenance coatings (less than 450 g/L).

USE

The Tyfo® U coating is applied as a protective finish over the Tyfo® systems to protect against harsh environments in industrial applications.

ADVANTAGES

- Outstanding performance in industrial applications
- Satin to semi-gloss finish, concrete grey
- Abrasion and impact resistant
- Chemical and stain resistant
- UV and weather resistant
- High temperature resistant
- Good working time, ambient cure
- 72%±2% solids by volume
- VOC content: 1.31 lbs./gal. (157 g/l)

PACKAGING

Pre-measured in 6-gallon (80 lbs.) or 1.2-gallon (17 lbs.) kits.

MIX RATIO

5 to 1 by volume

CONSUMPTION RATE

Dry film thickness: 3 - 5 mils per coat. Dry film thickness more than 7 mils per coat is not recommended.

Coverage rate: 385 ft²/gal at 3 mils dry film thickness.

Dry to recoat time: 8 hours at 73°F. Typical application: 2 coats.

SHELF LIFE

Part A: Three years at 75°F

Part B: Two years at 75°F

Store materials properly in original, unopened containers.

STORAGE CONDITIONS

Store at 60°F to 100°F (15°C to 38°C). Avoid moisture and water contamination. Product is moisture sensitive in the liquid state and until fully cured. Protect from heavy humidity, dew and direct moisture contact until fully cured. This product is solvent based and not affected by excursions below these temperatures, down to 10°F, for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.

Material Properties

Material properties are based on standard laboratory conditions (23°C, 50 percent relative humidity).

Property	Typical Test Value	
Net Volume	Component A	1-gal kit
	Component B	1-gal 5.0 gal
	Mixed	1-qt 1.0 gal 1.2-gal 6.0 gal
Color	Component A	Gray
	Component B	Clear to yellow
	Mixed	Concrete gray
Density (D792) Pounds/Gallon	Component A	14.0 (1.68 kg/L)
	Component B	9.3 (1.12 kg/L)
Pot Life (Working Time)	Mixed	1 to 2 hours
Viscosity	Mixed	6 hours

Coating Properties

Final cure schedule: 7 days at 73°F.

Property	ASTM Method	Typical Test Value
Dry Temperature Resistance		Continuous: 200°F Intermittent: 250°F
Abrasion Resistance	D4060	<60 mg avg loss after 1000 cycles (CS-17 wheel & 1000g load)
Adhesion Rating	D3359 Method B	5B
Water Resistance	D2247 (850 hr.)	No signs of blistering, cracking, delamination or rusting
Flexibility (Mandrel Bend)	D522	38.4% Elongation
Impact Resistance	D2794	Direct: 140 inch-lbs. Reverse: 50 inch-lbs.
UV Weathering	4 wk. accelerated UV cyclic test	No signs of blistering, cracking, or delamination. 72% gloss retention
Corrosion Resistance via Salt Spray (Fog)	B117 (850 hr.)	No signs of blistering, cracking, delamination or rust creepage at scribe

INSTALLATION THE TYFO® BC SYSTEM

INSTALLATION

The Tyfo® system is to be installed by FyfeFRP LLC LLC trained and certified applicators.

SURFACE PREPARATION

The required surface preparation is dependent on the type of element being strengthened. In general, the surface must be clean, dry and free of protrusions or cavities to prevent voids behind the Tyfo® system. Remove dirt, dust, oil and all

other contaminants that could interfere with adhesion of the coating. Adhesion strength dependent on surface preparation and substrate thickness. FyfeFRP LLC LLC engineering staff will provide the proper specifications and details based on project requirements.

MIXING TYFO® U

For pre-measured units, pre-mix the component A until uniformly blended. Pour the contents of component B into the component A container. Mix thoroughly with a low speed mixer at 400 to 600 RPM until A and B are uniformly blended. Resin may be heated to achieve desired viscosity (i.e. radiant heating, drum heaters, water bath).

APPLICATION

Tyfo® U is applied by roller, brush or spray equipment. When applied by brush, use a medium, natural bristle brush. When applied by roller, use a medium-nap mohair roller cover with solvent resistant core.

Conventional spray - pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.

Airless spray – Pump Ratio: 30:1 (min.)
GPM Output 2.5 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: 0.013-0.015",
Output PSI: 2100-2400
Filter Size: 60 mesh

LIMITATIONS

Recommended substrate temperature range is 50°F to 100°F (10°C to 38°C). All coating applications to be performed at a minimum of 5.4°F above the dew point. Maintain conditions for the first 48 hours of cure. Temperatures below 50°F will significantly increase the viscosity of the mixed product. Higher viscosity will reduce flow, introduce additional air into the system, and extend the cure times beyond 48 hours.

CAUTION!

CLEANUP

Collect with absorbent material. Dispose in accordance with local disposal regulations. Uncured material can be removed with approved solvent. Cured materials must be removed mechanically.

HAZARDS

Consult the Safety Data Sheets (SDS) for associated hazards. SDS will be supplied upon request. Components are classified as flammable liquids.

Consult Safety Data Sheet
(Sds) For More Information.
For Industrial Use Only.

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