TECHNICAL DATA SHEET

SOLIDGUARD TLS-100

4 July 2018, Rev 3



SOLIDGUARD TLS-100

FOOD GRADE EPOXY TANK LINING SYSTEM

DESCRIPTION

SOLIDGUARD TLS-100 is an extremely chemical resistant, solvent-free, food grade epoxy coating utilizing resins compliant with FDA regulation 21CFR 175.300 for coatings in contact with food, potable water and alcoholic beverages up to 12% alcohol by volume. The system is designed for the lining of concrete, metal tanks and pipes. The product exhibits excellent adhesion on wet or otherwise unprepared surfaces and green concrete with good cure properties even at low temperatures. Performance formulated for tanks exposed to extreme conditions in the food & beverage industry, wine & alcohol industry, sugar industry.

ADVANTAGES

- Excellent chemical resistance to a wide variety of corrosive chemicals
- Excellent water resistance
- Low temperature cure (< 0°C)
- Good flexibility
- Extremely tough and crack resistant.
- Excellent scratch and mar resistance
- Easy to clean
- Solvent free, HACCP Compliant
- Thermal shock resistant

APPLICATIONS

- Potable water tanks
- Brewery tank linings
- Wine tank linings
- Food storage tanks
- Ideal for protection of concrete & metal tanks against aggressive chemicals
- Withstands 10% Acetic acid, 50% Sodium Hydroxide and alcohol up to 12% by volume

TECHNICAL DETAILS

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Components	2 part
Mix Ratio	As supplied
Colour	Various Standard
Application	Brush, Roller,
	Airless Spray
Profile	Smooth
Finish	Gloss
Coverage	4-6m ² /L
Solids Content	100%
D.F.T per coat	160-250um
Recommended coats	2 (500um)
Pot Life	20 minutes (20°C)
Touch Dry	3 hours
Overcoat time	8 hours
Full Cure	4 days
Application	0 – 30°C
Temperature	
Service Temperature	Wet 50°C, Dry 70°C
Shelf Life	12 months
System details	
Concrete Repair	Techfin Eposhield
	Mortar
Primer	Solidguard STP
Top coat	Solidguard TLS-100

SUBSTRATE REQUIREMENTS

Surfaces to be coated must be clean and free of dust, oily residues and loose friable material. All surfaces to be suitably prepared using grinders, shot blasting or scarifiers to remove laitance. Substrate must be a minimum of 20MPa compressive strength and have a tensile pull off exceeding 1.5 MPa.

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APPLICATION

This is a specialized system that must be installed by an approved applicator with documented quality assurance. Consult Technical Finishes for list of approved applicators.

<u>Detailed application instructions are available upon request.</u>

CONCRETE REPAIR

Concrete tanks and pipes that require repairs should be repaired with **Techfin Eposhield Mortar** which will act as a bonding surface for subsequent coatings. Please see relevant datasheet for application instructions.

PRIMING

Concrete and plaster surfaces, apply **Solidguard STP primer**. Dense concrete may not require primer. Steel surfaces to be grit blasted to SA 2½, and apply **Solidguard 75 EPZ Primer**. Where grit blasting not possible, thoroughly wire brush to remove all loose rust.

APPLICATION

Mix the supplied resin and activator thoroughly with a mechanical drill mixer at 300 rpm for 3 minutes. Mix only enough product that can be applied within 20 minutes. Apply by brush, roller or Airless spray, two coats at 4-6m²/L per coat depending on the surface profile. Should more than 36 hours lapse between coats, lightly abrade with 100grit sand paper and solvent wipe with **Solidkote 505 Epoxy Thinners**.

HEALTH AND SAFETY

Some of the components of this product may be hazardous during mixing and application. Please consult your Technical Finishes representative for the relevant material safety datasheets.

SPECIFICATION

Technical Finishes products are guaranteed against defective materials and are manufactured under high quality standards and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request.