

# ShaliPoxy<sup>®</sup> 400

2K High Solid Food Grade Epoxy Coating



STP Limited

## Description

**ShaliPoxy<sup>®</sup> 400** is WRAS approved, fast setting, spray applied, solvent free, food grade, two component epoxy coating for internal / external lining of steel / concrete surface of pipes, vessels and other equipments used for portable water. **ShaliPoxy<sup>®</sup> 400** is spray applied by plural component airless spray gun.



**ShaliPoxy<sup>®</sup> 400** is solvent free and is ideally suited for food grade coating where higher film thickness is required as protective barrier.

**ShaliPoxy<sup>®</sup> 400** may be designed to meet specific physical and / or technical characteristics parameters required by the customer. The undernoted physical and / or technical parameters are of standard **ShaliPoxy<sup>®</sup> 400** produced by the company.

It conforms to BS : 6920:2000 and AWWA C-210.

## Characteristics - Physical

Color	Grey / Light Yellow	Ratio	3:1 By Volume
Pot Life @ 28 °C, 55% RH, 100 g, minute	22 ± 3	Touch Dry @ 27 °C, 55% RH, hr	Within 1 hr
Volume Solids, %	100	Hard Dry @ 27 °C, 55% RH, hr	6-8 hours
Specific Gravity (Mixed) @ 27 °C	1.30 ± 0.20	Full Cure @ 27 °C, 55% RH, days	7
Theoretical Coverage *, m <sup>2</sup> / L, 400 micron DFT	2.50	Application Temperature, °C	10 – 60 with RH ~ < 75%
Sagging	Passes	Cross-cut test	Passes

\* Depending upon surface condition

## Characteristics - Technical

Tensile strength, MPa	ASTM D 638	15 ± 3
Abrasion Resistance, 1000 cycle	ASTM D 4060	< 100 mg
Adhesion pull-off, MPa <ul style="list-style-type: none"><li>On concrete</li><li>On Steel</li></ul>	ASTM D 4541	> 3 > 10
Elongation, %	ASTM D 638	3 ± 1
Water vapor transmission, 24 hrs, gm / m <sup>2</sup>	ASTM E 96	0.10
Hardness Shore D, minute	ASTM D 2240	85 ± 5
Immersion test, 30 days <ul style="list-style-type: none"><li>DIW</li><li>1% H<sub>2</sub>SO<sub>4</sub></li><li>1% NaOH</li></ul>	AWWA C 210	No blistering / peeling / disbanding
Long term contact with potable water for human consumption	NSF/ANSI 61	No effect
Scratch Resistance, 1.5 kg load	IS:101	No failure
Compressive Strength (MPa)	ASTM C 109	70
Salt spray test, 5000 hr	ASTM B 117	Passes

## Application

- Excellent coating for internal / external lining of pipelines where abrasion / chemical resistance is of major concern.
- Being WRAS approved, excellent coating for internal / external linings of water pipelines.
- Internal coating for concrete / steel potable water storage.
- Sea water intake tunnels.

## Advantages

- Solvent free, fast setting, high build-up epoxy.
- Excellent film build capabilities exceeding 400 micron in single coat, which can be extended with multiple passes.
- Excellent food grade properties.
- Excellent chemical / abrasion resistance properties. to the surface corrosion, protection properties.
- Good temperature / abrasion resistance properties.
- Very low permeability.

## Application Methodology

### ➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease or other loose foreign particles by sand blasting / iron brush / compressed air.
- Prepare surface by mechanical grinding, shot blasting conforming to SA2½..

### ➤ Material Preparation

- Stir drums of each component thoroughly for uniformity. For best result, use a variable speed drill mixer with a spiral type blade at the bottom of stirrer rod. The speed may be 400-600 rpm.
- Pre heat part-A @ 50-70 °C and Part-B @ 50-60 °C.

### ➤ Application of Material

- Apply **ShaliPoxy® 400** by plural feed airless spray gun to the required thickness on the prepared substrate.
- The tip pressure typically should be 2500-4000 psi (the tip pressure should be adjusted to achieve good atomization of the spray).
- Tip size typically should be 27 - 35 Thou orifice.

## Cleaning & Maintenance

Clean all tools immediately after use with STP cleaner.

## Health & Safety

- Avoid contact with skin / eyes, and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

## Packing

Available in 200 L drum with 1 drum of Component B for every 3 drums of Component A.

## Storage

Store in a cool dry place, under shade, away from heat.

## Shelf Life

12 months in original, unopened, sealed condition.



**STP's Businesses**  
Waterproofing & Insulation  
Road Surfacing  
Pipeline Coating  
Protective / Anti-Corrosive Coating  
GARA (Grouts & Admixtures)  
Sealant & Adhesives  
Repairs & Rehabilitation  
Epoxy Flooring

