ShaliPoxy[®] 400

2K Food Grade Epoxy Coating For Plural Feed Airless Spray Gun



Description

ShaliPoxy® 400 is 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 equipment used for potable water. **ShaliPoxy® 400** is spray applied by plural feed airless spray gun.

ShaliPoxy[®] **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**[®] **400** produced by the company.



It conforms to BS : 6920 : 2014, IS 16676:2017 (Clauses 4.3 & 9.1) and AWWA C-210 : 2003, WRAS Approved.

Characteristics - Physical

| Colour | Grey / Light Yellow | Ratio | 3:1 By Volume |
|--|------------------------|-----------------------------------|--------------------------|
| Pot Life @ 28°C, 55% RH, 100 gram, minute | 22 ± 3 | Touch Dry @ 27°C, 55% RH, hrs. | Within 1 hrs. |
| Volume Solids, % | 100 | Hard Dry @ 27°C, 55% RH, hrs. | 6 - 8 hours |
| Specific Gravity (Mixed) @ 27°C | 1.45 ± 0.05 | Full Cure @ 27°C, 55% RH, days | 7 |
| Theoretical Coverage*, m² / L, 400 microns DFT / Coat | 2.50 | Application Temperature, °C | 10 - 60 with RH < 75% |
| Sagging | Passes | Cross-cut test | Passes |

^{*} Depending upon surface condition

Characteristics - Technical

| | | 1 |
|--|---------------|-----------------|
| Tensile strength, MPa | ASTM D 638 | 12 ± 3 |
| Abrasion Resistance, 1000 cycle | ASTM D 4060 | < 100 mg |
| Adhesion pull-off, MPa | ASTM D 4541 | |
| On concrete | | > 3 |
| On Steel | | > 10 |
| Elongation, % | ASTM D 638 | 3 ± 1 |
| Water vapor transmission, 24 hrs., gram / m ² | ASTM E 96 | 0.10 |
| Hardness Shore D | ASTM D 2240 | 80 ± 5 |
| Immersion test, 30 days | | |
| • DIW | | No blistering / |
| 1% H₂SO₄ | AWWA C 210 | peeling / |
| • 1% NaOH | | disbanding |
| Long term contact with potable water for human | NSF / ANSI 61 | No effect |
| consumption | | |
| Scratch Resistance, 1.5 kg load | IS:101 | No failure |
| Compressive Strength (MPa) | ASTM C 109 | 70 |
| Salt spray test, 5000 hrs. | ASTM B 117 | Passes |

Application

- Excellent coating for internal / external lining of pipelines where abrasion / chemical resistance is of major concern.
- Excellent coating for internal / external linings of potable 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.
- Good temperature 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 SA2¹/₂.

> 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.







Product Range

Waterproofing and Insulation Road Surfacing
 Sealants and Additives Pipeline Coating
 Protective / Anti-Corrosive Coating Epoxy Flooring
 Grouts / Admixtures RestoFix- Repair / Rehabilitation
 Other Construction Chemicals



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