

ShaliPoxy[®] CTE 306

2K 100% Solid High Build Solvent Free Modified Epoxy Coating



Description

ShaliPoxy[®] CTE 306 is 100% solid, fast setting, spray / brush applied, solvent free, moisture compatible, two component coal tar epoxy protective coating cured with polyamine hardener for internal / external lining of steel / concrete surface of pipes, vessels and other equipment used for water, mild chemical, oil and lubricant spillage.

ShaliPoxy[®] CTE 306 is solvent free protective barrier and is ideally suited for direct to metal coat where higher film thickness is required.

It conforms to AWWA C-210 – 2015, SSPC Paint 16 and Corp of Engineers C 200 / C 200a.

ShaliPoxy[®] CTE 306 has excellent corrosion / chemical / abrasion / scratch resistance and provides 250microns in single coat on DFT basis

Characteristics – Physical

| | | | |
|--|--------------------------|------------------------|--------------------------------------|
| Colour | Black / Semi-gloss | VOC, gm / L | NIL |
| Scratch resistance, kg | Up to 4 | Usable temperature, °C | Up to 75 |
| Mixing ratio, by volume | 3 : 1 | Volume Solid, % | 100 |
| Theoretical coverage*, m ² / L | 3.5 - 3.8 250 microns | Application | By Brush / Roller / Airless Spray |

* Depending upon surface condition.

Characteristics - Technical

| Property | Method | Result |
|--|-------------|---|
| Elongation, % | ASTM D 638 | >22 |
| Tensile Strength, MPa | ASTM D 638 | >3.5 |
| Hardness, Shore D | ASTM D 2240 | 55 ± 5 |
| Specific Gravity, Mix, 30°C | ASTM D 1457 | 1.4 ± 0.1 |
| Pot Life, hrs., 27°C, 100 gm | ASTM D 2471 | 1 - 1.5 |
| Adhesion pull-off, MPa | ASTM D 4541 | 8 ± 0.5 |
| Resistance to Micro-organisms | ASTM G 21 | Passes |
| Flexibility | ASTM D 522 | Good |
| Weather-ability, 1000 hrs. QUV | ASTM G154 | Good |
| Immersion test, 30 days <ul style="list-style-type: none">DIW1% H₂SO₄1% NaOH | AWWA C-210 | No blistering / peeling / disbanding |
| Salt Spray, 1000 hrs, @ 250 microns, DFT | ASTM B 117 | Excellent |
| Water absorption | ASTM D 570 | NIL |
| Water Resistance, Immersion- 7 days | ASTM D 870 | Passes |
| Abrasion Resistance 1000 Cycle CS 10, gm | ASTM D 4060 | 0.1 |
| Dielectric strength, V / mil | AWWA C 210 | >250 |
| Cathodic Disbondment, 30 days, mm | AWWA C 210 | <10 |
| Linear shrinkage, mm | ASTM C 531 | <0.6 |

| Application Temperature, °C | | | | Resistance Temperature, °C | | |
|-----------------------------|-------------|---------|---------|----------------------------|------------|------------|
| Condition | Application | Surface | Ambient | Condition | Continuous | Occasional |
| Minimum | 10 | 10 | 10 | High | 95 | 120 |
| Maximum | 49 | 50 | 41 | Low | -10 | -25 |

| Curing Schedule | | | | |
|-----------------|-----------------|---------|---------|-----------------|
| Temperature | Touch Dry, hrs. | Recoat | | Full Cure, Days |
| | | Minimum | Maximum | |
| 10°C (50°F) | 10 | 12 | 30 | 15 |
| 30°C (86°F) | 3 | 8 | 24 | 7 |
| 50°C (122°F) | 1 | 3 | 20 | 3 |

Application

- MS / concrete pipes and metallic structures.
- Crude oil storage tanks / underground structures / other metal & steel structures & pipes.
- Sheet & pipe piling.
- Dams, Barrage gates, Penstocks.
- Cooling towers and water retaining structures.
- Foundation walls and sumps.
- Concrete and Steel surfaces in sewage treatment plant.
- Paper Mills / Chemical Plants.

Advantages

- Flexible anti-corrosive / protective coating for structures – MS or concrete – even where the structure is in continuous contact with water.
- Compatible with controlled cathodic protection.
- Provides excellent resistance to impact, thermal shock and abrasion.
- Cures to a hard, smooth and flexible surface with excellent resistance to sea / salt water, oil, acids, alkalis, crude oil and minerals.

Application Methodology

• Surface Preparation

- Prepare the surface by mechanical grinding or other suitable method.
- Remove dust, flakes, oil, grease or other loose foreign particles by sand blasting, iron brush or compressed air.
- In case of new concrete, ensure the concrete is at least 28 days old.
- Ensure the ambient temperature is not less than 10°C and not more than 50°C at the time of coating.

• Material Preparation

- Stir drums of each component of **ShaliPoxy® CTE 306** thoroughly to a homogenous and uniform mix a slow speed mixture (approx. 400 rpm) fitted with a suitable mixing paddle
- Ensure that there is no entrapped air.
- Then mix the entire component A and component B, which are pre-weighed. After stirring, wait for the product to settle in order to let entrapped air escape.
- Place the spiral blade at the bottom of the container before starting the mixer. This will help avoiding inducting air into the mass. Slowly move the stirrer head up to the surface while stirring. Do not remove the blade while still it is spinning. This procedure is continued for 5 minutes up and down to have a homogeneous mixing.
- Allow the combined mix to sit for an induction time of 5 -10 minutes.
- Stir again gently with a hand stirrer to ensure uniformity before application.

➤ Application of Material

- Apply **ShaliPoxy® CTE 306** direct to metal or prime surface with **ShaliPrime® Zn Ph 60**.
- Allow minimum 4 hrs. for primer to touch dry.
- Apply first coat of **ShaliPoxy® CTE 306** on the prepared surface by brush / roller / airless spray.
- Allow it to touch dry
- If required, apply second coat of **ShaliPoxy® CTE 306** as above as per the technical data.

- In case of airless spray, use standard equipment having tip size of 0.48 - 0.88 mm and tip pressure 110 - 160 kg / cm².

Cleaning & Maintenance

- Clean all tools immediately after use with STP Thinner. Do not allow the material to harden.

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 20 L unit pack consisting 15 L Component A and 5 L Component B drum.

Storage

Keep in cool and dry place, under shed, away from heat.

Shelf Life

12 Months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 38°C.



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Enhancing Structures' Life

Product Range

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- Sealants and Additives ■ Pipeline Coating
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