

# ShaliProtek® 2E 80 MI

2K Epoxy Moisture Insensitive Phenolic Protective Coating



STP Limited

## Description

**ShaliProtek® 2E 80 MI** is two components phenolic moisture insensitive amine based, self-priming epoxy coating suitable for application over damp concrete (green concrete), moist metal surfaces, RH exceeding 85% and on under prepared surface.

**ShaliProtek® 2E 80 MI** shows high impact resistance for protection of steel / concrete structures against splash and spillage of corrosive chemicals and solvents at higher temperature.

**ShaliProtek® 2E 80 MI** is an excellent coating system for secondary containment, solvent storage, pump pads, trenches, bridges and other high exposure zones.

## Characteristics – Physical

Colour	Red or Grey	Service Temp, °C. - Dry	100 - 120
Volume Solid, %	80 ± 2	Surface Drying Time	3 ± 1 hrs. @ 85% RH
Theoretical Coverage*, m <sup>2</sup> / L, 100 microns DFT	7.8 - 8.0	Pot Life at 27°C, minutes, 100 gm. mix	55 - 65
Mixing Ratio, by Vol.	3 : 1	Scratch Hardness, kgs.	> 1.5
Scratch harness, 2 kgs.	Pass	Re-coat Time, hrs.	10 - 24
VOC, g / L	180	Full cure, days	7

\* Depending upon Surface Condition.

## Characteristics - Technical

Property	Method	Result
Shore Hardness D, 7 Days	ASTM D 2240	55 - 60
Elongation, %	ASTM D 638	30 ± 3
Tensile Strength, N / mm <sup>2</sup>	ASTM D 638	7 - 8
Specific Gravity	ASTM D 1475	1.40 ± 0.05
Impact Resistance	ASTM D 2794	150 kg-inch
Flash Point	IS 101	>30°C
Salt Spray, 2000 hrs.	ASTM B 117	Pass
Cathodic Disbandment	AWWA C 210	< 8 mm
Abrasion Resistance	ASTM D 4060	<100 mg
Chemical Resistance <ul style="list-style-type: none"><li>25% NaOH Solution</li><li>20% HCl Solution</li><li>30% H<sub>2</sub>SO<sub>4</sub> Solution</li><li>10 % HNO<sub>3</sub> Solution</li></ul>	In-House	Pass, No blister, wrinkling
Adhesion N / mm <sup>2</sup> <ul style="list-style-type: none"><li>Green Concrete</li><li>Metal</li></ul>	ASTM D 4541	> 2.6 > 8
Flexibility, 1/8"	ASTM D 522	Pass
Coating Resistance	In-house	10 <sup>9</sup> Ohm cm <sup>2</sup>

## Application

- Piling and bridge underdecks.
- Moist steel / moist concrete structures exposed to acid / alkali fumes emanating at high temperature, like in Ammonium Sulphate / Annealing / Acid Plants / Leather processing units, fertilizer plants etc.
- Anti-carbonation coating.

## Advantages

- Excellent resistance to acid and alkali vapours.
- Low VOC material.
- Bonds well at low temperature & humidity.

## Application Methodology

### ➤ Surface Preparation

- Remove dust, flakes, oil, grease or other foreign particles by jet or dry air and clean the surface by fresh water hosing prior to abrasive blasting to make it smooth before applying **ShaliProtek® 2E 80 MI**. Surface of steel must be prepared as per the NACE or SSPC guidelines at least to achieve SA 2½ level.
- For non-immersion purpose near white surface is adequate while for immersion purpose white metal surface is desired.

### ➤ Material Preparation

- Stir entire Component A thoroughly by using speed drill mixer with a spiral type blade at the bottom of stirrer rod till homogeneous mix is obtained.
- Add entire Component B in Component A. Both Component A & B comes in factory pre-weighed quantity in the ratios of 3 : 1 by volume.
- Mix to obtain a homogenous material.
- Wait for 5 minutes to ensure escape of entrapped air

### ➤ Application of Material

- Ensure that ambient temperature is in the range of 15 - 50°C.
- Ensure that the application area is well ventilated
- Although **ShaliProtek® 2E 80 MI** is self-priming, it is recommended to prime the surface by **ShaliPrime PUM** for concrete surface and **ShaliPrime Zn Ph 60** for metal surface.
- Allow the primer to dry completely before applying **ShaliProtek® 2E 80 MI**.
- Apply **ShaliProtek® 2E 80 MI** by brush / spray with medium or short nap squeegee rollers.

## 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 with 15 L Component A and 5 L Component B.

## Storage

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

## Shelf Life

12 months in unopened sealed condition.



**STP Limited**  
*Enhancing Structures' Life*

#### 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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