

# ShaliProtek<sup>®</sup> NES 70

2K Anti-Corrosive Chemical Resistant Novolac Based Phenolic Epoxy



STP Limited

## Description

**ShaliProtek<sup>®</sup> NES 70** is novolac based epoxy system for protection of metal structure against splash and spillage of corrosive chemicals and solvents at higher temperature. It is an excellent coating system for secondary containment, solvent storage, pump pads, trenches, bridges and other high exposure zones.

## Characteristics – Physical

Colour	White / Any Colour	Mixing Ratio, by volume	3 : 1
Service Temperature – Dry, °C	90	Scratch hardness, kg	> 1.5
Surface drying time, hrs @ 55% RB	2	Volume Solid, %	80 ± 2
Recommended DFT, micron	100 - 125	Theoretical coverage*, DFT, m <sup>2</sup> / L	6.96, 115 Micron
Pot life @ 27 °C, hrs, 100 gm mix	1	Overcoating	
Drying time, 30 °C <ul style="list-style-type: none"><li>• Touch dry, hrs</li><li>• Handle dry, hrs</li><li>• Hard dry, days</li></ul>	2 – 3	• Minimum, hrs	6
	6	• Maximum, days	7
	3	Temperature Resistance, (Dry) °C	Up to 90
Under insulation up to 230 °C	Pass		

\* Depending upon surface condition.

## Characteristics – Technical

Property	Method	Result
Shore Hardness D	ASTM D 2240	55 - 60
Elongation, %	ASTM D 638	25 – 30
Tensile Strength, N/mm <sup>2</sup>	ASTM D 638	7 – 8
Impact Resistance	ASTM D 2794	150 kg-inch
Flash Point, °C	IS 101	> 30
Salt Spray, 2000 hrs	ASTM B 117	Pass
Cathodic disbandment, mm	AWWA C 210	< 8
Abrasion resistance, mg	ASTM D 4060	90
Adhesion N/mm <sup>2</sup>	ASTM D 4541	> 2.6 – for concrete > 8 – for metal
Chemical Resistance <ul style="list-style-type: none"><li>• 20% NaOH Solution</li><li>• 25% NaOH Solution</li><li>• 20% HCl Solution</li><li>• 10% HNO<sub>3</sub> Solution</li><li>• 30% H<sub>2</sub>SO<sub>4</sub> Solution</li><li>• 10% Phosphoric Acid</li><li>• Diesel / Petrol</li></ul>		Pass, No blister No wrinkling

## Application

- Excellent anti-corrosive coating for concrete flooring exposed to acid / alkali fumes emanating at high temperature, like in Ammonium Sulphate / Annealing / Acid Plants.
- Leather processing units, fertilizer plants, are some of the areas where **ShaliProtek<sup>®</sup> NES 70** will work efficiently.

## Advantages

- Excellent resistance to acid and alkali vapours.

- Low VOC material.
- Bonds well at low temperature & humidity.
- Short re-coating time.

## Application Methodology

### ➤ Surface Preparation

- Remove dust, flakes, oil, grease or other foreign particles by jet or dry air and clean the surface to make it smooth before applying **ShaliProtek® NES 70**. Surface of steel must be prepared as per the NACE (National Anti-Corrosion Engineers) or SSPC (Steel Structure Protection Council) guidelines. For non-immersion purpose near white surface is adequate while for immersion service white metal surface is desired. Surface of steel and concrete must be free from dust, oil, soap and greasy material.

### ➤ Material Preparation

- Stir drums of each component thoroughly for homogeneousness with hand drill type stirrer to ensure dispersal of any settled filler for about 5 minutes for a 15 L pack. Then mix Component A and Component B in the ratio of 3:1 by volume. Stirring at slow speed for homogenization of the two components.
- 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 spinning. This procedure is continued for 5 minutes up and down to have a homogeneous mixing. Allow the mix 5 minutes, and then stir again gently with a hand stirrer to ensure uniformity and begin application.

### ➤ Application of Material

- Prime the surface with ShaliPrime® Zn Ph over metal surface whereas ShaliPrime® 2E in case of concrete surface
- Allow it to dry.
- Allow the primer to dry completely before applying **ShaliProtek® NES 70**.
- Apply **ShaliProtek® NES 70** by brush or 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

**ShaliProtek® NES 70** available in 20 L composite pack at the ratio of 3 : 1.

## Storage

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

## Shelf Life

12 Months in original 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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