



# Polyguard HS75

## EPOXY PHENOLIC NOVOLAC

**Product Description** A two-component epoxy phenolic novolac lining that is suitable for use in tanks, pipes, and secondary containment systems.

**Typical Uses** Polyguard HS75 is an internal lining that complies with API 652 regulations for the storage of crude and refined petrochemicals. It meets the performance and purity requirements of EI Standard 1541 for aviation fuel storage, as well as a wide range of solvents. The product is suitable for corrosion resistance to protect steel under thermal insulation subject to wet and dry cycles from -196°C to 230°C.

<b>Technical Properties</b>	<b>Color / Shades</b>	White, Grey, and Light Blue			
	<b>Gloss</b>	Semigloss			
	<b>Volume Solids</b>	75% ± 2			
	<b>Specific Gravity</b>	1.5 Kg/Liter			
	<b>Mix ratio</b>	4:1 by volume			
	<b>Typical Thickness</b>	125-175 micron [5-7 mils] dry equivalent to 175-225 microns [7-9 mils] wet			
	<b>Coverage</b>	6 m <sup>2</sup> /liter at 125 microns DFT (theoretical)			
	<b>Flash Point (Typical)</b>	37°C (98°F), mixed			
	<b>VOC</b>	< 250 g/Liter			
	<b>Reducer/Thinner</b>	Not Recommended			
	<b>Cleaner</b>	Thinner C1			
	<b>Drying Time</b>	<b>Surface Temperature</b>	13°C	25°C	49°C
		Touch dry	7 Hours	3 Hours	1 Hour
	Dry to handle	48 Hours	18 Hours	4 Hour	
	Recoat	Minimum:	48 Hours	18 Hours	4 Hours
		Maximum:	30 Days	30 Days	30 Days
	Cure to Service	14 days	7 Days	3 Days	
	Pot Life	4 Hours	2 Hours	30 Mins	
	Sweat-in time	30 Mins	15 Mins	None	

The drying times mentioned are based on a dry film thickness of 175 microns (7.0 mils) under standard conditions.

**Surface Preparation:** The level of surface preparation is crucial for the product's performance. The surfaces to be coated must be clean, dry, and free from contaminants. Before applying paint, all surfaces should be inspected and treated in accordance with ISO 8504:2000. Remove any accumulated dirt and soluble salts; typically, dry bristle brushing is sufficient for dirt removal, and freshwater washing can be used to eliminate soluble salts.

**Iron & Steel**

Immersion: Abrasive blast clean to a minimum Sa 2½ (8501-1:2000) or SSPC-SP6 to a sharp and angular profile of 2-3 mil (50-75 micron) [Medium (G) (ISO 8503-2)]. In case oxidation has occurred between blasting and application of the surface should be reblasted.



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### Concrete & Masonry

Immersion: The preparation should be according to SSPC-SP13/NACE 6-4.3.1 or 4.3.2.

Application	Application Method	Thinning	Application Parameters	
Conventional Spray	-		Gun	Binks 25
			Tip & Needle	66/65
			Air cap	65 PR
			Atomization Pressure	4.5 – 6.1 bar
			Fluid Pressure	1.0 – 1.4 bar
			Airless Spray	-
Airless Spray	-		Hose	9.5 – 12.7 mm
			Tip	0.43 – 0.53 mm
			Filter	60 mesh

For brush application, use nylon or polyester bristles. A 3/8" woven roller cover with a solvent-resistant core should be used for roller application.

### Note:

- The material is supplied in two containers as a complete unit. Always mix the entire unit in the proportions provided.
- Stir the base thoroughly for optimal results and homogeneity.
- Combine the entire contents of the hardener (Part B) with the base (Part A) and mix thoroughly using a power mixer before spraying. Continue mixing until the entire compound has been used, or use a steel rod to ensure complete homogeneity of the mixture.

### Application Conditions

- Maximum relative humidity: 85%
- The material must be mixed at a minimum temperature of 13°C (55°F).
- The surface temperature should be at least 3°C above the dew point.
- For standard hardener: Air temperature must be between 13°C (55°F) minimum and 49°C (120°F) maximum.
- For low-temperature hardener: Air temperature must be between 1.6°C (35°F) minimum and 27°C (80°F) maximum.

### Recommended Systems

- Steel, Immersion, and Atmospheric: Apply 2 coats of Polyguard HS75, 125 – 175 microns [5 – 7 mils].
- Concrete/Masonry, Smooth, Immersion & Atmospheric: Apply 2 coats of Polyguard HS75, 125 - 175 microns [5 - 7 mils].

### Note

- The above systems exemplify the products used; other systems may also be suitable.
- Polyguard HS75 can be applied at varying thicknesses, with a maximum of 400 microns (16 mils) total thickness, depending on the application conditions. For more information, please consult your TRPL representative.



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- Additional Notes**
- Light Blue incorporates Opti-Check OAP pigment technology, enabling rapid holiday detection when using safe blue light inspection lamps.
  - Do not mix previously catalyzed materials with new ones.
  - Tinting is permissible only for use in guide coats or prime coats.
  - The low-temperature hardener is not recommended for application temperatures exceeding 27°C (80°F).
  - It is suitable for use with cathodic protection systems.
  - Avoid using low-temperature hardeners for immersion service in methanol, ethanol, or their blends.
  - Ensure stripe coat all crevices, welds, and sharp angles to prevent premature failure in these areas.
  - The use of low-temperature hardeners may lead to accelerated yellowing of the coating.

### Storage

#### Shelf Life

12 Months, unopened

#### Storage Conditions

Store indoors at 4.5°C [40°F] to 38°C [100°F]

The product must be stored in accordance with national regulations. Keep the containers in a cool and dry place and well-ventilated area with no direct source of heat or light. Containers must be kept tightly closed when not in use.

**Safety:** Handle with care. Before & during use, observe all safety labels on packaging and paint containers, consult Material Safety Data Sheets, and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin & eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well-ventilated areas.

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