BERGER PROTECTON
PROTECTIVE COATINGS DIVISION

Epiphenolic HBTL

Two pack high build Epoxy Novolac, Phenolic

Issue Date : May 2025

Product Description

A high performance high build Epoxy Novolac, phenolic based tank liner for sustained immersion service in Hydrocarbon cargoes, refinery distillates, furnance oils etc., kept at elevated temperature. The self prime product possesss excellent chemical, water and solvent resistance.

Usage Areas

Recommended for use as a tank interior coating (both mild steel and concrete) in Refineries, Petrochemicals, Heavy Chemicals and other plants.

Product Data

Composition	Novolac Epoxy suitably pigmented with filler, extender and colorants cured with modified Amine Harderner
Volume Solids	70 ± 2%
VOC	258 gms/ltr
Mixing Ratio	Base : Catalyst - 6.4 : 1 by volume
Application Method	Airless Spray (Brush for touch up)
Recommended DFT	100 - 150 microns per coat
Recommended WFT	143 - 214 µ per coat
Theoretical Spreading Rate	4.7 - 7.0 m^2/ltr
Colour	Grey / Red Brown
Finish	Smooth with Egg Shell Gloss

Practical Coverage : Dependent on-site condition and transfer losses due to substrate design, profile, wind, heights, application method, painter's skill etc.

Pot Life

10°C	15°C	25°C	40°C
10 hrs	8 hrs	3 hrs	1.5 hrs

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Typical Coating Systems

Systems compatibility can be provided on request to the Technical Service Team

Coats	Generic Systems	Compatible Products
Primer	Epoxy Novolac Phenolic Tank Liner	Epiphenolic HBTL
Mid Coat	Epoxy Novolac Phenolic Tank Liner	Epiphenolic HBTL
Top Coat	Epoxy Novolac Phenolic Tank Liner	Epiphenolic HBTL

Pack size

	UOM	Part A	Part B	Total
Volume	Lt/Kg	17.3 ltr	2.7 ltr	20 ltr

Storage

The paints must be in its sealed original containers and be kept under cover in a dry place with ambient conditions inside closed room until use. The curing agent is sensitive to moisture and hence relative humidity within the room should be maintained preferably at ≤55%. Stacking should not be more than 3 drums/ cartons one above other. DO NOT expose to direct rain/ sunlight. Any deviation to the defined storage condition shall have a negative effect on the shelf life.

Shelf life

Up to 12 months as long as the sealed original containers are kept under cover in a dry place under normal temperature conditions until use.

Note :

1. Storage life @23°C will be extended up to 24 months. Storage at elevated temperatures may reduce shelf life; and hence never exceed maximum room temperature of 40°C. Storage life, thereafter, subject to re-inspection; consult tech-service.
2. It may be noted that higher volume solid material will tend to soft settling on long term storage, and it can made to a normal homogeneous consistency by use of a slow speed 200-400 rpm power stirrer particularly in the PART A (BASE) container; and this soft settling is not considered as a failure of keeping properties.

Flash Point

Part A	Part B	Mixed Paint
25°C	25°C	25°C

Health & Safety

Please refer to the separate Safety Data Sheet available with detailed information.

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APPLICATION GUIDELINE

Substrate	Steel, Concrete	
Surface preparation	**Steel** : Remove grease, oil and other contaminants preferably by using Solvent Cleaning as per SSPC SP1. Abrasive Blast clean to a minimum SSPC SP10. For severe corrosive conditions, blast clean to SSPC SP5 with a surface profile not exceeding 55 microns. Special care must be taken on weld areas to remove flux and spatter; welds should be ground backto avoid pockets. The cleaned surface should be clean and dry and coated before it gets contaminated. **Concrete : New Concrete :** Ensure that the concrete is cured for a minimum of three months. The surface is to be made rough and free from laitance and other contaminants by sand sweeping. **Old Concrete :** Remove all salt deposits from the surface by water jet washing. Light sand blast the surface to remove all loosely bound coatings and roughening up of firmly adhering coatings to ensure anchorage with recommended system. Ensure all dust/other particles are fully removed by suction or air blast and the surface is fully clean and dry before application of the recommended Primer.	
Atmospheric Condition	Ventilation	Suitable air engineering systems, which will ensure reduction of air contaminants and thatto further help regulate the temperature and humidity of the working environment.
	Dew Point	Ensure surface temperature to be more than 3°C over the dew point temperature.
	Humidity	Do not apply when relative humidity rises above 85%.
Mixing	Stir the base thoroughly and then mix base to a homogenous mixture and then add recommended part of catalyst to uniform consistency. NOTE : DO NOT ADD THINNER beyond recommendation as it will reduce mixed VS calling for revised WFT calculations as well as challenges on flow properties.	
Thinner	Thinner 844	

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Application

Stir base thoroughly and then mix the components in the recommended ratio to a homogenous consistency. Allow the mixture to mature for 30 minutes and stir again before use and during application.

Airless Spray : Apply preferably without thinning. However, if required, add upto 5% Thinner 844. Use any standard equipment having pump ratio 55 : 1 or more.

Tip Size : 0.53 - 0.63 mm. **Tip Pressure :** 110 - 160 Kg/Sq cm.

Work Stoppage

Ensure to use the mixed paint within pot life as there are no methods to increase working pot life. Keep the working tools and tips free of drying and clogging. Always use fresh material and never add-up to previous mixed paints.

Clean Up

Clean all equipment immediately after use with thinner 844. It is good working practices to flush or clean all the spray equipment periodically.All the surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations.

Drying Time

Temperature	Touch Dry	Handle Dry	Hard Dry
10°C	4 hrs	12 hrs	16 hrs
23°C	2 hrs	4 hrs	10 hrs
30°C	1.5 hrs	3 hrs	6 hrs
40°C	1 hrs	2 hrs	4 hrs

Over Coating Intervals

	@23°C	@30°C
MIN	4 hrs	3 hrs
MAX	7 days	5 days

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Curing Time	7 days NOTE : Drying and Curing times are determined under controlled temperatures and at relative humidity below 85%, for the NDFT of the product.
Inspection	Refer SSPC PA2 guidelines for measurement of DFT. Do not conduct any destructive test like peel off/ pull off & high voltage Holiday test unless and otherwise mandatory in the specification. Consult Technical Service team for preparation of QAP (Quality Assurance plan).
Repair Methodology	Clean off loose paints, debris, contaminants and ensure spot repair with available tools as practiced in hand/ power tool cleaning using wire brush/buffing, emery/feathering to smoothen the edges of impaired areas. Use appropriate touch up primer followed by recommended coating system, allowing due over coating interval time to area of 2-3 inches in excess of the spot repaired portion.
Product Characteristics	• Epiphenolic HBTL exhibits excellent resistance to alkalis, solvents, salts, and water when immersed. • It can sustain Wet Heat upto 180°C. • Flexibility is good, allowing movement without damage. • Abrasion resistance is excellent, ensuring long-lasting wear protection
Disclaimer	The information contained within this Data Sheet is based on information believed to be reliable at the time of its preparation. The Company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control.