Technical Data Sheet Korepox EH2350 (Two-Component)



Product Description

A two-component, polyamine cured pure epoxy resin based self-priming, anti-abrasion coating with excellent resistance to seawater, crude oil, fuel oil and abrasion. Applicable over new or old steel requiring only the removal of loose rust as a surface tolerant coating, workable at low temperature even -18 °C/-0.4 °F and meets VOC requirements as high solids coating.

Approved as a Corrosion Control Coating for water ballast tanks by Lloyd's Register of Shipping (LR) and Germanischier Lloyd (GL) and excellent water ballast tank coating (B-1 Class) from MARINTEK/DNV. Approved as a Fire Retardant Coating by Det Norske Veritas (DNV, CE Marking), Lloyd's Register of Shipping (LR) and Korean Register of Shipping (KR) and a Non-Contamination Paint for grain cargoes by New Castle Occupational Health Agent (UK), It is in full accordance with the requirements in NORSOK M-501 System No 1, No.3B and No.7.

Packing

Korepox EH2350 is supplied as two separate packages.

-. Base (Part A) and Curing agent (Part B) in the correct proportion for the mixture. Do not open package until use. Each package (Base and Curing agent) must be used entirely for mixing to ensure the mixing ratio. Left-over material in the packages cannot be used.

Recommended Use

As an anti-corrosion and anti-abrasion coating for long-life protection of steel structures in severely corrosive environment such as Underwater hull outside, Boottop, Topside, Exposed parts of ship, Water ballast tank, Cargo holds, etc. As a tank coating for ship's crude oil tanks, fuel oil tanks and interior of pipe lines transfer crude oils, etc.

Applicable to steel structures for offshore projects, plants, bridges and others.

For application in water ballast tanks at newbuilding stage in accordance with PSPC (IMO Res. MSC.215(82), see the "Technical Information for PSPC Applications-Korepox EH2350"

Physical Properties

Finish and Color 1151(Greyish yellow), 1128(French grey)
Solids by Volume Approx. 80 % (Determined by ISO 3233)

Specific Gravity Approx. 1.50 for Mixture of Base and Curing agent.

Flash Point

Base (EH2350PTA) : 26°C / 79°F (Closed cup)
Curing Agent (EH2350PTB) : 26°C / 79°F (Closed cup)

Application Details

Surface Preparation

Remove any oil, grease, dirt and any other contaminants from the surface before painting by proper method such as solvent cleaning and fresh water washing, etc.

- Blast cleaning to Sa2½ or power tool cleaning to St3, etc.
- Profile requirements : $30 \sim 75 \mu \text{m}$ in case of full or partial blast cleaning.

Application Condition

The surface should be adequately clean and dry. Do not apply when relative humidity is above 85 %. The surface temperature should be at least 3°C / 5°F above dew point to prevent condensation. Temperature during application and curing is preferable from -18°C / 0°F to 49°C / 120°F. This temperature condition is for the substrate and surrounding air.

Mixing

EH2350PTA (Part A, Base): EH2350PTB (Part B, Curing agent) = 4:1 (by volume)

- Mix with supplied mixing ratio only. Do not vary or subdivide.
- Before mixing, shake or stir the Base very thoroughly.
- Pour the curing agent into the Base with constant mechanical stirring.

Do not mix in reverse order.

Continuous stirring until mixture is free of lumps

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Ventilation Adequate ventilation with clean air should be maintained during application and curing to assist

solvent evaporation.

Cleaner Thinner No. 024 or Tool cleaner 009

Pot Life 3 h at 20°C / 68°F

Pot life may be shorter under higher temperature and humid conditions.

Preceding Coat According to specification.

Shelf Life 12 months

Standard Packing

Unit

16 L (EH2350PTA: 12.8 L, EH2350PTB: 3.2 L)

Safety Precautions Protect skin and eyes from direct contact with liquid paint, and avoid prolonged breathing of solvent

vapors.

Use with adequate ventilation.

Respiratory protection is recommended when applying this product in confined spaces or stagnant

air.

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Application

: Airless or Air spray Spray

: Recommended for small area and stripe coating for specified edges, welds, Brush and Roller

hard to reach areas, etc.

For airless spray application;

Nozzle orifice :482 μ m ~ 787 μ m (0.019" ~ 0.031")

 $:40^{\circ} \sim 60^{\circ}$ Fan

: 11.7 MPa ~ 15.2 MPa Output pressure Airless Pump Ratio : $45:1 \sim 73:1$

(Airless spray data are indicative and subject to adjustment)

Recommended **Coating System**

■ For Water Ballast Tanks

1st Coat : Korepox EH2350 (1151, 160 μm DFT / 200 μm WFT) 2nd Coat : Korepox EH2350 (1128, 160 µm DFT / 200 µm WFT)

-. Depending on the purpose and the area of use, different film thickness may be applied.

Product Name

: Thinner No. 024 or Other thinner approved by KCC

Thinning Ratio

 $: 5\% \sim 10\%$ (by volume) * Do not dilute each component separately

Typical Film Thickness

Thinning

(Per Coat)	Typical	Minimum	Maximum
Dry Film Thickness (μm)	160	75	*
Wet Film Thickness (µm)	200	94	*
Theoretical Spreading Rate (m²/L)	5.00	10.67	*

^{*} Max. total 2,000 µm dry (as guideline of coating application. For more detailed information, consult with TSD (Technical Service Department) in KCC)

Drying Time & Recoating Interval

Substrate temperature	5°C	10°C	20°C	30°C
	/ 41°F	/ 50°F	/ 68°F	/ 86°F
Dry to touch	8 h	3 h	1 h	0.5 h
Dry to walk on	16 h	8 h	3 h	3 h
Dry to hard	16 h	8 h	3 h	3 h
Dry to recoat (Full / Min.)	16 h	8 h	3 h	3 h
Dry to recoat (T/up / Min.)	16 h	8 h	3 h	2 h
Dry to recoat (Max.)	12 d	12 d	12 d	12 d
Dry to immersion (Full)	5 d	4 d	2 d	2 d
Dry to immersion (T/up)	3 d	3 d	2 d	1 d

h: hours, Full: Full coat application, T/up: Touch-up application.

^{*} These are the results from laboratory tests done under standardized conditions. Thus, actual times may be different due to environment situations such as weather, wind and humidity,