



Type Approval Certificate

[Fire Retardant Paint]

Initial Approval 2 November 2023

Manufacturer KCC Corporation, Ulsan Plant
30, Bangeojinsunhwan-doro, Dong-gu, Ulsan, Korea

Product Description - Brand : Koramel Primer H.B. MP120 (Modified alkyd resin based primer)
Koramel Enamel LT313 (Alkyd resin based coating)
Korepox EP174 (Two component, amine adduct cured epoxy resin based primer)

- Intended for : Surface material with low flame-spread characteristics

- Manufacturing Site : Kumkang Paint(OEM)
86-75, Chugok-gil, Gogyeong-myeon, Yeongcheon-si

See "Appendix 1"

Approval Condition See "Appendix 1"

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt.8, Ch.2 of the Rules for Classification of Steel Ships, IMO 2010 FTP Code Annex 1 Part 5 and Annex 2.2.

This Certificate is valid until 1 November 2028

Issued at Busan, Korea on 2 November 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23048336973) and certificate No.(ULS00785-FP031).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 2 November 2023

A. Product Description

1. Product Specification

- A) Koramel Primer H.B. MP120
 - 1) Modified alkyd resin based primer
 - 2) Tested Dry Film Thickness : 66 ~ 77 μm
 - 3) Tested Color of Paint : Brown
- B) Koramel Enamel LT313
 - 1) Alkyd resin based coating
 - 2) Tested Dry Film Thickness : 49 ~ 56 μm
 - 3) Tested Color of Paint : Grey
- C) Korepox EP174
 - 1) Two component, amine adduct cured epoxy resin based primer
 - 2) Tested Dry Film Thickness : 176 ~ 232 μm
 - 3) Tested Color of Paint : Grey

2. Approved Drawings and Documents

- 1) Technical Data from Manufacturer

3. Test Reports, etc.

- 1) Test report No. AK2023-0292 dated August 02, 2023 from Fire Insurers Laboratories of Korea(FILK) for product: Koramel Primer H.B. MP120
- 2) Test report No. AK2023-0291 dated August 02, 2023 from Fire Insurers Laboratories of Korea(FILK) for product: Koramel Enamel LT313
- 3) Test report No. AK2023-0290 dated August 02, 2023 from Fire Insurers Laboratories of Korea(FILK) for product: Korepox EP174

B. Approval Condition

1. Application & Limitation

- 1) The certificate holder is to submit the application of alteration to this Society for change of the specifications(materials, composition, etc.), manufacturing facilities, manufacturing methods and/or quality control system.
- 2) This approval does not cover the characteristics such as anti-corrosion performance, service life, or environmental properties other than tested performance.
- 3) Using of darker paint than tested color can not be covered by this approval.
- 4) Approval Certificate for Manufacturer (Cert. No.: ULS00785-PA001) is to be retained validly apart from this Approval.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is not required.

3. Marking

- 1) Product or packing is to be marked with manufacturer's name, type designation, date of production and batch number on a suitable position.

4. Others

- 1) Smoke and toxicity test were dispensed by meeting the total heat release(Q_t) and peak heat release rate(Q_p) in accordance with IMO FTP Code Annex 2.2.

< End of certificate >