EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008GM

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Surface materials and floor coverings with low flame-spread characteristics: paint systems

with type designation(s)
Modified Epoxy Resin Coating System

Issued to
Chugoku Paints B.V.
Heijningen, Noord-Brabant, Netherlands

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2023/1667,**
item No. MED/3.18b. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-11-08**.

Issued at **Høvik** on **2023-11-09**

DNV local unit:
Netherlands CMC

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

"Modified Epoxy Resin Coating System",
system composed of 1-4 coats (topcoat) of modified epoxy resin UMEGUARD SX or UMEGUARD SX QD (dry film thickness 320 µm).

Maximum thickness: 320 µm (dry film thickness)

Application/Limitation

Approved for use as low flame spread material, not generating excessive quantities of neither smoke nor toxic products in fire.

Approved for use as paint systems on a metallic substrate with thickness of at least 2.4 mm.

UMEGUARD SX or UMEGUARD SX QD:
Approved paint colour: white, light grey, grey
Maximum organic content (dry film): 24 wt%

The product satisfies the requirement for maximum calorific value (ref. SOLAS Chapter II-2, Reg. 5.3.2.2) without further testing.

Each product is to be supplied with its manual for application and maintenance.

Type Examination documentation

Test report No. 22-427(E) dated 29 March 2023 from RIME, Tokyo, Japan.

Product data sheet No. 426EE, UMEGUARD SX dated 23 June 2020 from manufacturer.
Product data sheet No. 429EE, UMEGUARD SX QD dated 23 June 2020 from manufacturer.

Safety data sheet No. 426EE, Ver.5, UMEGUARD SX BASE dated 25 June 2020 from manufacturer.
Safety data sheet No. 426EE0000, Ver.5, UMEGUARD SX HARDENER dated 25 June 2020 from manufacturer.
Safety data sheet No. 249EE0000, Ver.6, UMEGUARD SX QD HARDENER dated 29 October 2020 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 5 and Annex 2, item 2.2 and 2.3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, MED Mark of Conformity and USCG approval if applicable (see page 1).