

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007E3

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

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

with type designation(s)
TEFROKA® HLS Deck Covering incl. TEFROKA® HLS Sealer

Issued to

G. Theodor Freese GmbH
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2020/1170,
item No. MED/3.18c. 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

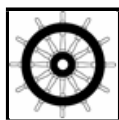
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-05-05**.

Issued at **Hamburg** on **2021-05-06**

DNV local station:
Hamburg – CMC North/East

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for **DNV SE**

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Christine Mydlak-Roeder
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) 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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

“TEFROKA® HLS Deck Covering incl. TEFROKA® HLS Sealer” is a floor covering used as abrasion-resistant corrosion protection structure which consists of a multilayer component composed from bottom to top as follows:

Composition 1:

1. TEFROKA EP zinc red lead
2. TEFROKA EP iron mica
3. TEFROKA HLS deck covering
4. Inorganic aggregate
5. TEFROKA HLS Sealer

Composition 2:

1. TEFROprime EP 30
2. TEFROKA HLS deck covering
3. Inorganic aggregate
4. TEFROKA HLS Sealer

	Composition 1	Composition 2
Max Thickness	4.4 – 4.8 mm	5.0 – 5.3 mm
Layer thickness	1.4 – 1.8 mm	2.0 – 2.3 mm
Surface Density	~ 25.38 kg/m ²	~ 25.95 kg/m ²
Colour	Grey	Grey

For further details refer to the documentation listed below under “Type Examination documentation”.

Application/Limitation

Floor covering, not generating excessive quantities of smoke nor toxic products in fire.

The product may be applied over any steel or non-combustible material.

Not to be used as an integrated part of horizontal class A division unless tested as such.

The product may also be used as primary deck covering.

Each product is to be supplied with its manual for installation.

Type Examination documentation

Test report No.200435 dated 17th of April 2020 from Warringtonfire Frankfurt GmbH, Frankfurt, Germany.

Test report No.200487 dated 05th of May 2020 from Warringtonfire Frankfurt GmbH, Frankfurt, Germany.

Test report No.201065 dated 04th of February 2021 from Warringtonfire Frankfurt GmbH, Frankfurt, Germany.

Test report No.201132 dated 04th of February 2021 from Warringtonfire Frankfurt GmbH, Frankfurt, Germany.

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex 1, Part 5 and Part 2.

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.117/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval as allowed by the “Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment” signed February 27th, 2004 and amended by Decision No.1/2018 dated February 18th, 2019.

Marking of product

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