

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB000017R Revision No: 1

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 Non-combustible materials

with type designation(s) FireMaster Marine Plus Blanket

Issued to Thermal Ceramics UK Ltd Wirral, Merseyside, United Kingdom

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

Regulation (EU) 2020/1170, item No. MED/3.13. SOLAS 74 as amended, Regulation II-2/3 II-2/5, II-2/9 & X/3, 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 2026-08-21.

Issued at Høvik on 2021-08-22

DNV local station: Manchester

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 1/2019 dated February 22nd, 2019.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 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.





Job Id: Certificate No: Revision No: 344.1-000502-116 MEDB000017R

Product description

"FireMaster Marine Plus Blanket"

insulation blanket made from non-combustible alkaline earth silicate fibres.

- Thickness range: 6 65 mm
- Density range: 44 128 kg/m³
- Nominal organic content: 1%

The insulation material FireMaster Marine Plus may incorporate a water repellent treatment.

"FireMaster Marine Plus Blanket Alu 35"

insulation material FireMaster Marine Plus Blanket faced on one side with 0.035 mm aluminium foil. The foil is glued to the blanket with a sodium silicate adhesive.

"FireMaster Marine Plus Blanket Alu 20 R"

insulation material FireMaster Marine Plus Blanket faced on one side with 0.02 mm aluminium foil with a glass fibre net type RG 2/2. The foil is glued to the blanket with a polyethylene adhesive.

"FireMaster Marine Plus Blanket GC"

insulation material FireMaster Marine Plus Blanket faced on one side with a glass fibre fabric from Porcher Industries. The glass fibre fabric is glued to the blanket with a silica-based adhesive.

Application/Limitation

Approved for use as non-combustible materials.

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

Insulation material with surface layer have to be approved for low flame spread characteristics (test for surface flammability) according to the Marine Equipment Directive and bear the Mark of Conformity.

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

Type Examination documentation

Test report No. 2006CS012672/1 dated 22 August 2006 from RINA, Italy.

Test report No. 2006CS012672/2 dated 24 August 2006 from RINA, Italy.

Test report No. 2006CS012672/3 dated 25 August 2006 (with Supplement dated 6 October 2006) from RINA, Italy.

Test report No. 2006CS012672/4 dated 28 August 2006 (with Supplement dated 6 October 2006) from RINA, Italy.

Test report No. 2006CS012672/5 dated 4 September 2006 from RINA, Italy.

Test report No. 2011CS012615 dated 26 September 2011 from RINA, Italy.

Test report No. 334864 dated 28 November 2013 from Exova Warringtonfire, Warrington, UK.

Test report No. 362628 dated 24 June 2016 from Exova Warringtonfire, Warrington, UK.

Tests carried out

Tested according to IMO FTPC Part 1 and Part 5 and Annex 2 item 2.2 and in compliance with the IMO 2010 FTP Code Ch. 8. Test report No. 334864 was tested according to IMO 2010 FTP Code Part 1.

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 number if applicable (see page 1).