DNV·GL

Certificate No:
TAF00001F3

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Non-Combustible Material

with type designation(s)
FyreWrap Durablanket Marine

Issued to
Unifrax France SA
Lorette, France

is found to comply with
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL rules for classification – Ships
DNV GL offshore standards

Application :

Approved for use as non-combustible materials.

This certificate is recognized by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2021-01-18**
This Certificate is valid until **2021-06-23**.
DNV GL local station: **France CMC**

Approval Engineer: **Helge Bjørnarå**

for **DNV GL**

Mårten Schei-Nilsson
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Job Id: **262.1-017901-19**
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Product description
"FyreWrap Durablanket Marine",
Product mainly composed of insulation ceramic fibre with nominal density of approx. 96 - 128 kg/m^3.
Max organic content is <1.5%.

This product can be manufactured at:
- Unifrax Brazil Ltd, Avenida Independencia, 7033, Bairro Sao Matheus, Vinhedo SP 13280-000, Brazil.
- Unifrax (Suzhou) Co. Ltd, 59 Shiyand Road, Xushuguan New Zone, 21551 Suzhou, China.
- Luyang Energy-saving Materials Co., Ltd, Plant #1, No.11, Yihe Road, Yiyuan County, Zibo, Shandong, China (Mainland).
- Unifrax France, 17 Rue Antoine Durafour, BP2, 42420 Lorette, France.
- Unifrax India Private Ltd., 99 KM Stone, Ahmedabad Surendranagar Highway, Dist. Surendranagar, Lakhtar, 382775, Gujarat, India.
- Unifrax I LLC, 54401 Smilax Road, New Carlisle, Indiana 46552, USA.

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.

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

Type Approval documentation
Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

Test report No. FT10056 dated 18 January 2010 and from FEFTC, Shanghai, China.
Test report No. FT10057 dated 18 January 2010 and from FEFTC, Shanghai, China.

Tests carried out
Tested according to IMO FTPC Part 1 and in compliance with IMO 2010 FTP Code Ch.8.

Marking of product
The product or packing is to be marked with name of manufacturer and type designation.

Transport Canada Approval
Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment
DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.