



Certificate No:
TAF00001SE

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Surface Material of Low Flame Spread

with type designation(s)
ArmaFix AF - ArmaFix NH - ArmaFix Ultima

Issued to
Armacell GmbH
Münster, Nordrhein-Westfalen, Germany

is found to comply with
DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021
DNV offshore standards
DNV rules for classification – Ships

Application :

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

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

This certificate is recognized by Transport Canada.

Issued at **Høvik** on **2022-12-07**

This Certificate is valid until **2027-12-06**.

for **DNV**

DNV local unit: **Essen**

Approval Engineer: **Timo Linn**

Jowita Permoda
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 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.



Form code: TA 251

Revision: 2022-12

www.dnv.com

Page 1 of 2

Product description

"ArmaFix AF - ArmaFix NH - ArmaFix Ultima" consists of a PET foam bearing segment embedded and glued to ArmaFlex elastomeric Foam material. Outside bearing shell made from painted aluminum 2 sheeting 0.8 mm thick.

Nominal thickness: 10 - 50 mm

Density: 100± 5kg/m³

Colour: Black grey, dark blue

Organic content: 44-50%

Application/Limitation

Approved for use on metallic substrate with thickness of at least 0.75 mm.

The product may only be used on cold service pipe work/fittings for refrigeration system everywhere onboard, and for pipe work, fittings, air ducts and tanks insulation in cargo areas, mail rooms, baggage rooms and refrigerated compartments of service spaces, and exterior locations (SOLAS II-2/5.3.1.1). (Piping for hot or cold sanitary water can not be considered "cold service pipework/fittings".)

Maximum gross calorific value shall be documented separately where applicable, ref. SOLAS Chapter II-2 Reg. 5.3.2

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

Extent of application is to be considered and accepted for each case/project.

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

Type Approval documentation

Certification in accordance with Class Program DNV-CP-0338, October 2021.

Test reports No. 1122\DC\REA\20 dated 07st of October 2020 from CSI, Italia

Test reports No. 0935\DC\REA\20 dated 27th of August 2020 from CSI, Italia

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex 1, Part 5 and in compliance with Annex 2, 2.2 and 2.3

Marking of product

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

Transport Canada Approval

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

Periodical assessment

DNV 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 DNV-CP-0338, Section 4.