Certificate no.:
TAF00001VA

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Thermal and sound insulation material with low flame-spread characteristics

with type designation(s)
AF/ArmaFlex EVO

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 rules for classification – Ships
DNV offshore standards

Application:

Approved for use as combustible insulation material with low flame-spread characteristics, not generating excessive quantities of smoke nor toxic products in fire.

This certificate is recognized by Transport Canada.

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

Issued at **Høvik** on **2024-04-17**
This Certificate is valid until **2029-04-16**.
DNV local unit: **Essen**

for **DNV**

Approval Engineer: **Nanna Martine Jacobsen**

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.

Product description

"AF/ArmaFlex EVO",
Composed of flexible elastomeric foam insulation based on a synthetic rubber with built-in Microban® (antimicrobial protection).

Product may be bonded to the surface with self-adhesive ArmaFlex tape or Armaflex contact adhesive (application rate 100 g/m²).

Density: 48-75 kg/m^3 (ArmaFlex tape 65-90 kg/m^3).
Thickness: 3 mm – 50 mm.

Place of production:
Armacell GmbH, Robert-Bosch-Str. 10, 48153 Münster, Germany.

Application/Limitation

Approved for use as combustible insulation material with low flame-spread characteristics, not generating excessive quantities of smoke nor toxic products in fire.

Approved color: Black.
Maximum organic content: 40%

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

The combustible insulation with low-flame spread characteristics may be used in cargo spaces, mail rooms, baggage rooms and refrigerated compartments of service spaces as well as for cold service pipework/fittings for refrigeration systems (SOLAS Reg. II-2/5.3.1.1). Piping for hot and cold sanitary water is not regarded as "cold service pipe work/fittings".

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 Programme DNV-CP-0338, September 2021.

Test report No. SL/Z-263/FTP5/283a/2021 dated 30 April 2021 from SYCHTA Laboratorium, Police, Poland.
Test report No. SL/Z-263/FTP5/290a/2021 dated 30 April 2021 from SYCHTA Laboratorium, Police, Poland.
Test report No. SL/Z-263/FTP5/287a/2021 dated 30 April 2021 from SYCHTA Laboratorium, Police, Poland.
Test report No. SL/Z-263/FTP5/289a/2021 dated 30 April 2021 from SYCHTA Laboratorium, Police, Poland.
Test report No. SL/Z-382/FTP5/413a/2021 dated 15 June 2021 from SYCHTA Laboratorium, Police, Poland.
Test report No. SL/Z-382/FTP5/412a/2021 dated 15 June 2021 from SYCHTA Laboratorium, Police, Poland.

Tests carried out

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

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

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 (TP14612)", DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV'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 DNV-CP-0338, Section 4.