Certificate no.:
TAE00004U7

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Fire Stop System for Cable

with type designation(s)
ArmaProtect ABLC

issued to
Armacell GmbH
Münster, Nordrhein-Westfalen, **Germany**

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

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

Issued at **Høvik** on **2023-12-13**
This Certificate is valid until **2028-12-12**.
DNV local unit: **Essen**

for **DNV**

Approval Engineer: **Carsten Hunsalz**

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

Solvent-free, water based dispersion with inorganic fillers for fire stop systems on electrical cables.

Type:	ArmaProtect ABLC
Colour:	white or grey
Density:	1,34 - 1,48 g/cm³
PH-value:	Aprox. 7,4
Viscosity:	6.000 - 10.000 mPas

Recommended dry film thickness: 0,5 mm

For spraying and brush-painting application.

Application/Limitation

Precautions against fire spreading in cable bunches:

The cable or the bunched cables to be coated on all sides. In enclosed and semi-enclosed spaces cable runs to be coated at least 1 metre in every 14 metres for horizontal runs and to entire length of vertical runs.

This approval is only valid for coating applied by Armacell GmbH or according to Armacell GmbH application instructions.

Type Approval documentation

Tests carried out

IEC 60332-3-22, Category A: 2018 for 60 minutes,
DIN EN 60332-3-22 / VDE 0482-332-3-22

Marking of product

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

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer’s product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE