

Marine & Offshore

Certificate number: 31629/B0 MED File number: ACI1360/001/009 Item number: MED/3.18d

This certificate is not valid when presented without the full attached schedule composed of 7 sections www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2018/773 of 15 May 2018

> This certificate is issued to: Armacell GmbH Münster - GERMANY

Munster - GERMANY

SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: PIPE INSULATION COVERS

ARMAFLEX ULTIMA

Requirements:

SOLAS 74 convention as amended, Regulations II-2/3, II-2/5, II-2/6, II-2/9, X/3 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 7 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 7 IMO Res MSC.307(88) -(2010 FTP Code) IMO MSC/Circ.1120

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 16 Nov 2023

For Bureau Veritas Marine & Offshore Notified Body 2690, At BV HAMBURG, on 16 Nov 2018, Jens Bauermeister

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This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark 🕥) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

<u>1. PRODUCT DESCRIPTION :</u>

"ARMAFLEX ULTIMA"

Insulating material for piping made up of closed-cell elastomeric foam based on synthetic rubber

- Nominal density: 56-65 kg/m³

- Color : blue

- Thickness : 3 mm to 32 mm

- Either glued to pipes with adhesive "Armaflex Ultima adhesive" (application rate 250 g/m²) or self-adhesive coating on modified acrylic basis

- Tested glued on 1 mm steel sheet

2. DOCUMENTS AND DRAWINGS :

Technical data sheet "Armaflex Ultima" dated 2016.

3. TEST REPORTS :

3.1 - Test report n° 20673080-10a, APS4-Hau/Wa, dated 28/09/2017 as per IMO FTP Code 2010 Annex 1 Part 5, from DMT GmbH & Co. KG, Germany.

3.2 - Test report n° 20673080-10b, APS4-Hau/Wa, dated 28/09/2017 as per IMO FTP Code 2010 Annex 1 Part 5, from DMT GmbH & Co. KG, Germany.

3.3 - Test report n° 7P65863 rev 1, dated 12/10/2017 as per IMO FTP Code 2010 Annex 1 Part 5, from RISE AB, Sweden.

3.4 - Test report n° 7P65863-1 rev 1, dated 12/10/2017 as per IMO FTP Code 2010 Annex 1 Part 5, from RISE AB, Sweden.

4. APPLICATION / LIMITATION:

4.1 - In application of FTP Code 2010 Annex 2 § 2.2, the product is expected to satisfy the requirement of smoke & toxicity without further testing.

4.2 - In application of FTP Code 2010 Annex 2 § 2.3, the product is expected to satisfy the requirement of maximum gross calorific value (e.g. 45 MJ/m^2) without further testing.

4.3 - Approved for use as insulation of pipes fittings for refrigeration systems and chilled water piping for air-conditionning.

4.4 - The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - This certificate does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - For information concerning the production phase modules, **ARMACELL GmbH** has declared the following manufacturing sites :

Armacell GmbH Robert-Bosch Str. 10 48153 Münster Germany Armacell Iberia, S.L. Pol. In. Riera d'Esclanyà, C/Can Magí, 1 17213 Esclanyà – Begur (Girona) Spain Armacell Poland Sp. o.o. Targowa 2 55300 Sroda Slaska Poland

6. MARKING OF PRODUCT :

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS :

7.1- It is **ARMACELL GmbH**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2- This certificate supersedes EC Type Examination Certificate N° 31629/A2 EC issued on 03/12/2015 by the Society.

*** END OF CERTIFICATE ***