

Marine & Offshore Division

Certificate number: 10825/D0 EC File number: ACI 1360/001/004 Annex A1 Item number: A.1/3.18d

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

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Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

as per Module B of European Union Council Directive 96/98/EC on marine equipment as amended by Commission Directive 2014/93/EU

This certificate is issued to

Armacell GmbH

Münster - GERMANY

for the type of product

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

NH/ARMAFLEX

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.61(67)-(FTP Code)- with IMO Res MSC.307(88) -(2010 FTP Code)- article 8

IMO MSC/Circ.1120

This certificate is issued on behalf of the French Maritime Authorities to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.

This certificate is a renewal of certificate N° 10825/C2 EC expiring on 11/02/2016

This certificate will expire on: 11 Feb 2021

For BUREAU VERITAS Notified Body 0062,

At BV HAMBURG, on 03 Feb 2016, Jens Bauermeister

ps Bands



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 B 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. 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 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 Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said 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.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

NH/ARMAFLEX

Thermal insulation material for piping* made up of halogen-free flexible elastomeric foam.

Glued on the steel pipe (Armaflex adhesive, maximum application rate as per test) or using self-adhesive.

Dark Grey color - Tested glued on 1 mm steel sheet.

Density: approx. 55-85 kg/m³. Maximum thickness: 32 mm.

2. DOCUMENTS AND DRAWINGS:

Technical data sheet dated 2016.

3. TEST REPORTS:

- 3.1 32 mm : Test report n° FX102984 dated 24.03.2011 as per IMO FTP Code Annex 1 Part 5 [testing standard: IMO Resolution A.653(16)] from SP Laboratories, Sweden.
- 3.2 6 mm : Test report n° FX15227 dated 19.10.2011 as per IMO FTP Code Annex 1 Part 5 [testing standard: IMO Resolution A.653(16)] from SP Laboratories, Sweden.
- 3.3 6 mm : Test report n° FX15227-1 dated 19.10.2011 as per IMO FTP Code Annex 1 Part 5 [testing standard: IMO Resolution A.653(16)] from SP Laboratories, Sweden.
- 3.4 32 mm: Test report n° FX15227-2 dated 19.10.2011 as per IMO FTP Code Annex 1 Part 5 [testing standard: IMO Resolution A.653(16)] from SP Laboratories, 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-conditioning.
- 4.4 The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 This certificate alone 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 B 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 places :

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:

Markings as per MED 96/98/EC:

XX are the last two digits of year mark affixed.

^{*} Application limited as per §4.3.

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- **7. OTHERS:** 7.1- This approval is given on the understanding that the Manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.
- 7.2- This certificate supersedes EC Type Examination Certificate N° 10825/C1 EC issued on February 1st, 2013 by the Society.

*** END OF CERTIFICATE ***