

MARINE DIVISION

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Certificate number: 10828/B1 EC

File number : ACI 1360/001/005

Annex A1 Item number : A.1/3.18d

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

EC TYPE EXAMINATION CERTIFICATE

*as per Module B of European Union Council Directive 96/98/EC on marine equipment
as last amended by Commission Directive 2002/75/EC of 2 September 2002*

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
AF / ARMAFLEX**

Regulations and standards :

SOLAS 74 Convention, as amended, Regs. II-2/3.29, II-2/3.40.5, II-2/5.3.2.4, II-2/6.2 - IMO Resolution MSC.97(73)(2000 HSC Code) 7.4.3.4, 7.4.3.5, 7.4.3.6 - IMO Resolution A.653(16) - IMO Resolution MSC.61(67), Annex 1 Parts 2 & 5, and Annex 2 - ISO 1716(1973) - IMO MSC/Circ.916, as amended by IMO MSC/Circ.1008 - IMO MSC/Circ.1004.

This certificate is issued under the French Maritime Authority 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 valid until : 07 Jun 2011

At Paris la Défense, on : 21 Sep 2006

For BUREAU VERITAS, Notified Body N°0062
By order of the Secretary

Approval office

Local office : BV HAMBURG
Surveyor : U. Storm


J. BENOIT



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 S.A. 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 Division. 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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

"AF / ARMAFLEX" - Insulation material for piping

Insulating sheets and pipes made up of elastomeric foam based on synthetic rubber.

Density approx.: 2816 g/m³.

Thickness: from 6 up to 32 mm.

2. DOCUMENTS AND DRAWINGS :

As per documentation filed under ACI 1360/001/005.

3. TEST REPORTS :

Test report n° SN97.42.2 dated September 29, 1997 as per IMO FTP Code, Annex 1, Part 5 [testing standard: IMO Resolution A.653(16)] from TÜV Nord, Germany.

4. APPLICATION / LIMITATION :

- "AF / ARMAFLEX" complies with the Smoke and Toxicity requirements as per IMO FTP Code, Annex 2, Paragraph 2.2.
- Calorific value to be less than 45 MJ/m³ as per ISO 1716(1973).
- For use as insulating material in refrigeration systems and chilled water piping for air-conditioning systems.
- Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").

On board installation & Maintenance requirements:


- The Manufacturer's instruction manual should be kept on board.
- The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The production conformity assessment module shall either be "D, Production-Quality Assurance" or "E, Product-Quality Assurance" or "F, Product Verification".

5.2 - Each equipment or batch of equipment is to be supplied with its manual (or instruction) for installation, use and maintenance in the language required by the Ship's Flag Administration.

6. MARKING OF PRODUCT :

-  conformity mark and number of the Notified Body undertaking surveillance module (where BV, 0062).
- Last two digits of year mark affixed.

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° 10828/B0 EC issued on 07.06.2006 by the Society.

***** END OF CERTIFICATE *****