



MARINE DIVISION

Certificate number: 03626/F0 BV

File number: ACM 198/2601/002

Product code: 0012D

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

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

MARINE SERVICE JAROSZEWICZ S.C.

Szczecin - POLAND

for the type of product

POURABLE COMPOUNDS FOR ENGINE CHOCKING

Type: "EPY"

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 27 May 2018

For BUREAU VERITAS,

At BV GDANSK, on 27 May 2013,

Janusz URBAN



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. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine 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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Type : EPY

Resin Epoxy Compound intended for chocking of Diesel Engines, Reduction Gears and Thrust bearings, Mooring and Anchor Whinches.

2. DOCUMENTS AND DRAWINGS:

As per catalogue.

3. TEST REPORTS:

Type test conducted on November 1994 at Politechnika Szczecinska according to ASTM-D 621 and ASTM-D 648.

4. APPLICATION / LIMITATION:

4.1 - Application / Limitation of use:

The product referred to in this certificate of approval may be used for chocking main and auxiliary engines, reduction gears and thrust bearings.

- Maximum total pressure including dead weight, bolts tension and mechanical reaction to torque and thrust: 5 MPa.
- Maximum service temperature permitted in way of the chocks: 80°C.

Chocking design of engines and/or reduction gears shall take into account if necessary, the mechanical reaction to torque and thrust.

Chocking plan shall take into account following parameters:

- For Diesel engines:
 - weight of engine,
 - bolts tightening,
 - value of upsetting moment,
 - loads due to ship motions (rolling, pitching, ramming).
- For reduction gears or thrust bearings:
 - weight of reduction gear or thrust bearing,
 - bolts tightening,
 - value of upsetting and rocking moments,
 - propeller thrusts.
- The product referred to in this certificate of approval may be used for chocking of Mooring and Anchor Whinches.
- - Maximum total pressure including dead weight, bolts tension and mechanical reaction to traction: 30 MPa.
 - Maximum service temperature permitted in way of the chocks: 80°C.

4.2 - On board installation & Maintenance requirements:

The working up of this product is to be carried out under supervision of the Maker or a qualified Agent.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The EPY compound *is* to be supplied by **MARINE SERVICE JAROSZEWICZ** in accordance with the type described in this certificate.

5.2 - This type of product is within the category DBV of Bureau Veritas Rule Note NR320.

6. MARKING OF PRODUCT:

Packaging are to be marked, at least, with:

- Manufacturer identification
- Product identification
- Date of manufacture and expiration date
- Storage conditions
- Serial number.

7. OTHERS:

7.1 - It is understood that the herewith mentioned manufacturer will give the shipyards and related subcontractors all the relevant information for the proper fitting and uses of the product covered in this Type Approval Certificate. This information has to include the conditions stated in the Certificate.

It is also understood that Bureau Veritas remains rightfully entitled to perform any check or test on the product at any time.

7.2 - This Certificate supersedes the Type Approval Certificate N° 03626/E0 BV issued on 17/03/2008 by the Society.

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