

TYPE APPROVAL CERTIFICATE

Certificate no .: TAP00001Z9 Revision No: 4

This is to certify:

that the Oil spray protection system

with type designation(s) MF-03 Antispray Tape, 50 mic, MF-03 Antispray Tape, 80 mic, MF-03 Antispray Tape, 100 mic, MF-04 Antispray Tape

issued to MAREFLEX GmbH Hamburg, Germany

is found to comply with **DNV** rules for classification – Ships DNV class programme DNV-CP-0502 – Type approval – Oil spray protection systems

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV. Screening of pipe joints and fittings in accordance with IMO SOLAS Consolidated Edition, 2009, Chapter II-2/ Regulation 4, item 2.2.5.3

Max. working press.:
15 bar
25 bar
25 bar
55 bar

Issued at Hamburg on 2024-11-14

This Certificate is valid until 2029-11-13. DNV local unit: Gdansk CMC

Approval Engineer: Ana Cristina Do Carmo Insfran



Digitally Signed By: Sven Klinger Location: DNV Hamburg, Germany

for DNV

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 USD 300 000.



Job ID: 262.1-008678-8 Certificate no.: TAP00001Z9 Revision No: 4

Product description

Mareflex MF-03 Antispray Tape is made of single layer aluminium, impregnated fiberglass and release liner with a special adhesive for installation.

Mareflex MF-04 Antispray Tapes are made of multilayer aluminium, impregnated fiberglass and release liner with a special adhesive for installation.

For use in engine rooms or other enclosed spaces as wrapping around possible sources of leakage in fuel oil piping to help prevent fuel spray in event of a leak, as a means of meeting the requirements of the IMO SOLAS, Ch. II-2, Reg.4, 2.2.5.3.

Reference is also made to IMO FTP Code - IMO Resolution MSC.61(67).

Mareflex MF-03 and MF-04 Antispray Tapes are available at following dimensions:

Width (mm)	x Length (m)
35	x 10
50	x 10
75	x 10
100	x 10
140	x 10
250	x 10
500	x 10
1000	x 10

Application/Limitation

The extent of use is limited to spray shielding applications on oil pressure pipes located above the floor plates and which have no insulation in way of the joints. Use is also restricted to readily accessible positions where the integrity of the application may be inspected regularly, and new covering will be applied after removal for maintenance purposes.

The fitting of Mareflex Antispray Tape is to be carried out in accordance with the Manufacturer's instructions.

The Mareflex Antispray Tape cannot be used for pipes insulation, or as replacement for pipe gaskets and sealings.

Type Approval documentation

Renewal TAP00001Z9 – Rev. 4 Type Approval Application dated on 2024-09-27 Type Approval Assessment Report dated on 2024-11-12

Test Report of surface flammability of materials MF-03 (80 mic. and 50 mic.) no.: IBR/Z-031-2023 dated on2023-06-24 Pressure Test – Report no.: I/2023 dated on 2023-06-20 Installation Instruction, Ver. 2.01 Specification for adhesive

Tests carried out

- Szczecin University of Technology, ref.TZ/FTP-5/101/2006, dated 06-03-2006, Test Report of the Results of Test for the Flame Spread on Floor Coverings, ref. IMO FTP Code – IMO Res. MSC.61(67).
- The Institute of Technical Textiles "MORATEX", Test Report No. 43/2004, dated 2006-04-28, Tensile Strenght Test and Coating Adhesion Test.
- A-SPE, Pressure Test Report of Mareflex MF-01 Antispray Tape, November 2006.
- Institute of Security Technology "MORATEX", Test Report No. 252/2009,
- dated 13.08.2009, Coating Adhesion Test.
- West Pomeranian University of Technology, Szczecin, ref.TZ/FTP-5/207/2009, dated 11-09-2009, Test Report of the Results of Test for the Surface Flammability of Materials, ref. IMO FTP Code – IMO Res. MSC.61(67).

-Test report of surface flammability of materials for MF-01 (Acrylic adhesive) Antispray Tape, 10-01-2019, at West Pomeranian University of Technology



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-Test report of surface flammability of materials for MF-01 (Silicone adhesive) Antispray Tape, 05-04-2018, at West Pomeranian University of Technology

-Test report of surface flammability of materials for MF-02 Antispray Tape, 16-05-2019, at West Pomeranian University of Technology

-Test report of surface flammability of materials for MF-03 Antispray Tape, 17-09-2020, at West Pomeranian University of Technology

-Test report of surface flammability of materials for MF-04 Antispray Tape 17-09-2020, at West Pomeranian University of Technology

-Pressure test report No 1/2019 for MF-01 (Acrylic adhesive) Antispray Tape, MF-02 Antispray Tape, MF-03 Antispray Tape and MF-04 Antispray Tape, witnessed by DNV GL 26-06-2019

-Pressure test report No 1/2019 for MF-03 (Acrylic adhesive), witnessed by DNV GL 08-09-2020

-Pressure test report No 1/2019 for MF-04 (Acrylic adhesive), witnessed by DNV GL 08-09-2020

Manufacturer

A-SPE Europe Sp. J., Agatowa 5, 82-310 Gronowo Górne, Poland

Place of Production

For MF-03, MF04: A-SPE Europe Sp. J., Agatowa 5, 82-310 Gronowo Górne, Poland

Marking of product

-Manufacturer's Name -Product Type.

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to DNV-CP-0338, Sec.4.

The certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <u>https://approvalfinder.dnv:com</u>

END OF CERTIFICATE