



DET NORSKE VERITAS

EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2010/68/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-7928**

This is to certify that the
Retro-reflective materials

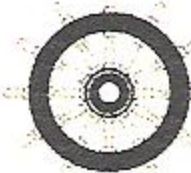
with type designation(s)
Mareflex MF-20 & MF-21

Manufacturer
MAREFLEX GmbH
HAMBURG, Germany

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/1.30 and Annex B, Module B in the Directive. SOLAS 74, Regulation III/4, III/34 & X/3, LSA Code and 2000 HSC Code 8

Further details of the equipment and conditions for certification are given overleaf.

Høvik, 2012-09-06
for Det Norske Veritas AS



This Certificate is valid until
2017-09-06


Marianne Strand Valderhaug
Head of Department

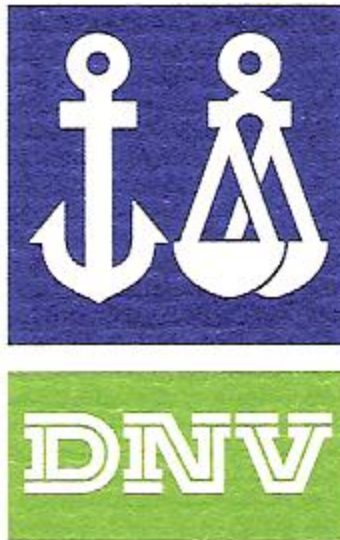
Notified Body No.: **0575**

DNV local office:
Gdansk


Piotr Orzechowski
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-7928
Item No.: A.1/1.30
Job Id.: 344.1-001105-2

Product description

MF-20 is a retro-reflective material with self-adhesive foil for application at GRP, PVC coated tarpaulins for life raft, PVC coated lifebuoy or rubber life raft.

MF-21 is a retro-reflective material on polyester fabric without self-adhesive foil, intended for sewing on textiles.

Application/Limitation

The material shall be fitted on lifesaving appliances in accordance with the LSA Code and IMO Res. A.658(16) Annex 1.

Type Examination documentation

Test report No 0797/CBM/2011, dated 31.07.2012 from Motor Transport Institute, Warsawa.

Test report No 0382/CBM/2011, dated 02.08 2011 from Motor Transport Institute, Warsawa.

Tests report No. 0765/ZOE/06, dated 20.04.2007 from Motor Transport Institute, Warsawa.

Test report No. 348/2008, dated 27.10.2008 from The Institute of Security Technology "MORATEX".

A-SPE Technical Specification and Installation Instructions, dated 2007-08.

Tests carried out


Tested according to IMO Resolution A.658(16) Annex 2.

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation and Mark of Conformity.

The marking shall be according to LSA Code, item 1.2.2.9.

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity  according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

