

# CERTIFICATE OF TYPE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer Daoming Optics & Chemical CO.,Ltd

Address No.001 Yingbin Road,

3rd Xiangzhu Industrial Zone,

321313 Yongkang city Zhejiang province

People's Republic of China

Product Type Retro-Reflective Materials

Product Description Type II: Highly weather-resistant retro-reflective material for lifesaving

appliances suitable for continuous outdoor exposure; Type "DM1101B"

Specified Standards IMO Resolution A. 658(16)

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue 16 May 2019 Expiry date 15 May 2024

Certificate No. SAS S190037 Signed

Sheet No 1 of 3 Name L. Thomas

Surveyor to Lloyd's Register EMEA A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



### Lloyd's Register EMEA (Southampton)

Marine & Offshore UK&I

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#### **DESIGN APPRAISAL DOCUMENT**

Date	Quote this reference on all future communications	
16 May 2019	UKITSO/LSA/TA/LT/WP34335857	

#### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S190037

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

### **EXAMINED DOCUMENTATION**

Enterprise Standard Q/ZDM06-2016, dated 23/08/2016

Product Outline, Document Number DM1101B-001, dated 24/03/2016

#### **TEST REPORTS**

Retro-reflective sheeting DM1101B Test Report No 2015023, conducted at Wuhan Testing Centre of Marine Life-saving Appliances, in accordance with IMO Res. A.658 (16) and dated 7th July 2015.

#### **CONDITIONS OF CERTIFICATION**

- 1. The material shall be marked and identified as required by the paragraph 1.2.2.9 of LSA code and other applicable regulations
- 2. Approval of this material is only applicable to its use when applied to Life-Saving Appliance as defined by the applicable Regulation stated on Page 1 of this Certificate
- 3. When fitting retroreflective material on life saving appliances, guidance may be taken in accordance with examples shown in Annex 1 of IMO Resolution A.658(16)
- 4. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
- 5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5
- 6. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/ assembly/ testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place

#### PLACE OF PRODUCTION

Zhejiang Longyou Daoming Optics & Chemical Co., Ltd No. 7, Xing Road Chengnan Industrial Zone Longyou Quzhou City Zhejiang Province 324400



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### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S190037



Lijo Thomas Senior Specialist Fire & Safety, Statutory Discipline Team UK&I Technical Support Office, Marine & Offshore Lloyd's Register EMEA

## Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).