EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000086M

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Non-combustible materials

with type designation(s)
New nanometer insulating material (NF-ARG)

Issued to
Shanghai I&G Co., Ltd.
SHANGHAI, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157,**
item No. MED/3.13. SOLAS 74 as amended, Regulation II-2/3 II-2/5, II-2/9 & X/3, 2000 HSC Code 7 and IMO 2010 FTP Code

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

This Certificate is valid until **2027-11-29**.

Issued at **Hamburg** on **2022-11-30**

DNV local unit:
Shanghai

Approval Engineer:
Roland Priebe

Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004, and amended by Decision No 1/2018 dated February 18th, 2019.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 300,000 USD.

Product description

The **New nanometer insulating material (NF-ARG)** consists of a homogeneous white fibre.

	Nominal	Measured
Thickness:	5 x 10 mm	50 mm
Density:	150 – 190 kg/m³	185 kg/m³
Moisture content		1.86%
Organic content:		2.81%
Colour:		White

For further details refer to the documentation listed below under “Type Examination documentation”.

Application/Limitation

Approved for use as a non-combustible material with surface layer of low flame spread characteristics, not generating excessive quantities of smoke nor toxic products in fire.

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code annex 1, Part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report No. AJFS2209007182FF dated 2022-09-16 from SGS, Anji, Zhejiang, China.

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex1, Part 1

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval if applicable (see page 1).