Certificate no.:
TAK00002D3

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Insulation Materials for Gas Carriers

with type designation(s)
Glass Wool: D22 and D35

issued to
Zhejiang Pusen New Material Technology Co., Ltd.
HUZHOU, ZHEJIANG, China

is found to comply with
Gaztransport & Technigaz Specification Nr. M3016, Glass Wool, Rev. 02, November 2015

Application:

For use in MARK III and NO96 type Cargo Containment Systems (CCS) of gas carriers built under GTT's license.

Issued at **Hamburg** on **2024-08-29**
This Certificate is valid until **2029-08-28**.
DNV local unit: **Shanghai**

for **DNV**

Approval Engineer: **Gisle Hersvik**

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 300,000 USD.

Product description

D22 and D35: Glass Wool
- D22: Density 22 (0, +3) kg/m^3
- D35: Density 35 (-2,+3) kg/m^3

Manufactured by

WILLVIC ENERGY SAVING TECHNOLOGY HEBEI CO., LTD, Dacheng city, Langfang city, Heibei Province, P.R. China

DNV local station: Shanghai

Responsibility

The Company (stated on the front page of this Certificate) takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Application/Limitation

The material is only approved for use in MARK III and NO96 type Cargo Containment Systems of gas carriers built under licence from GAZTRANSPORT & TECHNIGAZ SAs (GTT).

Deliveries to actual shipbuilding projects shall be in compliance with the GTT Specification Nr. M3016 "Glass Wool", latest revision dated November 2015, and the product shall have a valid approval from GTT.

Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

Tests carried out

Type Testing carried out according to **Type Approval documentation**.

Marking of product

Product/package shall be marked with the *manufacturer's name*: **Zhejiang Pusen New Material Technology Co., Ltd., China**, *Lot No., Size, Quantity* and *type designation*.

The marking is to be carried out in such a way that it is visible, legible and indelible.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This 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 https://approvalfinder.dnv.com

END OF CERTIFICATE