

TYPE EXAMINATION CERTIFICATE

This is to certify:**That the Adhesive Materials for use in Insulation of Gas Carriers**

with type designation(s)

Load Bearing Mastic; ULBM 527/ULBM 627

Issued to

Uni-Tech Co., Ltd.**Ansan-si, Gyeonggi-do, Republic of Korea**

is found to comply with

Gaztransport & Technigaz Specification Nr. M3508, Load Bearing Mastic, Rev. B, January 2008**Application :****For use in NO96 type LNG carriers built under GTT's license.**Issued at **Høvik** on **2018-07-04**This Certificate is valid until **2023-07-03**.DNV GL local station: **Seoul**for **DNV GL**Approval Engineer: **Gisle Hersvik**

Rikard Törnqvist
Head of Section

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 Examination Certificate and not to the approval of equipment/systems installed.



Product description

ULBM 527/ULBM 627; Two-component epoxy adhesive / load-bearing mastic.

- ULBM 527: Resin
- ULBM 627: Hardener

Application/Limitation

The material is only approved for use in NO96 type LNG containment systems built under license from GAZTRANSPORT & TECHNIGAZ SAs (GTT). Deliveries to actual shipbuilding projects shall be in compliance with the "Load Bearing Mastic" Specification, GTT document Nr. M3508, latest revision Rev B, January 2008, and the product shall have a valid approval from GTT.

Type Examination documentation

Tests carried out

Type Testing carried out in accordance with **Type Examination documentation**.

Marking of product

Product shall be marked with *manufacturer's name*; **Uni-Tech Co., Ltd., Ansan, Korea** and *type designation*; **ULBM 527/ULBM 627**.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Examination Certificate.

Periodical assessment

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

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Examination documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Examination documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Examination Certificate.

END OF CERTIFICATE