DNV·GL

Certificate No:
TAK000013D

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Insulation Materials for Gas Carriers

with type designation(s)
KCI Metalia H-15 NC

Issued to
Kangnam Jevisco Co., Ltd.
Gyungsangnam-do, Korea

is found to comply with
Gaztransport & Technigaz Specification Nr. M3001, Paint for Inner Hull Protection, Rev. 03, December 2015

Application :

For use in MARK III & V type LNG carriers built under GTT's license.

Issued at **Høvik** on **2018-01-16**
This Certificate is valid until **2023-01-15**.
DNV GL local station: **Gimhae Station**

Approval Engineer: **Stefan Marion**

for **DNV GL**

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.

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Job Id: **262.1-027663-1**
Certificate No: **TAK000013D**

Product description

KCI Metalia H-15 NC: A vinyl butyral wash primer for the temporary protection of steel, galvanized steel or light metal surfaces.

Application/Limitation

KCI Metalia H-15: Paint/Primer for Inner Hull Protection.

The products are only approved for use in MARK III & V type LNG carriers built under licence from GAZTRANSPORT & TECHNIGAZ SA (GTT). Deliveries to actual shipbuilding projects shall be in compliance with the "Paint for Inner Hull Protection" specification, GTT document no. M3001, Rev. 03, December 2015.
The product shall have a valid approval from GTT.

Type Examination documentation

Tests carried out

Type Testing carried out according to **Type Examination documentation**. The Type Test results on which this Type Examination is based are found in:

- GTT Approval Testing Report No. MAT-RPT-001957 of 2017-08-23 "Approval Testing Report – M3001 Rev 03 – Paint KCI Metalia H-15 NC Red by Kangam Jevisco".

Marking of product

Product shall be marked with the *manufacturer's name*; **Kangnam Jevisco Co., Ltd., Korea** and *type designation*.

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.

Certificate Retention Survey

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