



Certificate no.:
TAF00001XF

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Non-Combustible Material**

with type designation(s)

DAEHYUP SPRAY S (120K and 140K) and DAEHYUP SPRAY G (45K, 55K and 65K)

issued to

Daehyup Spray Co., Ltd.
Ulsan, Republic of Korea

is found to comply with

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021

DNV rules for classification – Ships

DNV offshore standards

Application:

Approved for use as non-combustible material.

This certificate is recognized by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2024-09-02**

This Certificate is valid until **2029-09-01**.

for **DNV**

DNV local unit: **Ulsan**

Approval Engineer: **Helge Bjørnara**

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.



Form code: TA 251

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Product description

"DAEHYUP SPRAY S (120K and 140K)",
consists of rock wool and equally mixed binder (LPA and LPB).

Nominal density: 120 kg/m³ and 140 kg/m³.

"DAEHYUP SPRAY G (45K, 55K and 65K)",
consists of glass wool and equally mixed binder (LPA and LPB).

Nominal density: 45 kg/m³, 55 kg/m³ and 65 kg/m³.

Application/Limitation

Approved for use as non-combustible material.

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

Maximum organic content (dry weight):

DAEHYUP SPRAY S (120K and 140K): 2%

DAEHYUP SPRAY G (45K, 55K and 65K): 2%

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

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Test report No. 2009-0884 dated 23 September 2009 from FILK, Gyeonggi-Do, Korea.

Test report No. 2009-0885 dated 23 September 2009 from FILK, Gyeonggi-Do, Korea.

Test report No. 2009-1091 dated 14 October 2009 from FILK, Gyeonggi-Do, Korea.

Test report No. 2009-1092 dated 14 October 2009 from FILK, Gyeonggi-Do, Korea.

Test report No. KOMERI-0402-13T2615 dated 17 January 2014 from KOMERI, Busan, Korea.

Tests carried out

DAEHYUP SPRAY S (140K) and DAEHYUP SPRAY G (45K, 55K and 65K):

Tested according to IMO FTPC Part 1 and in compliance with IMO 2010 FTP Code Ch. 8.

DAEHYUP SPRAY S (120K):

Tested according to IMO 2010 FTP Code part 1.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)", DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4.