

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Surface Material of Low Flame Spread**with type designation(s)
DM-1433

Issued to

Dong Myung Ind. Co., Ltd.
Changwon-si, Gyeongsangnam-do, Republic of Korea

is found to comply with

DNV GL rules for classification – Ships**DNV GL offshore standards****DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations****Application :****Low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-09-11**This Certificate is valid until **2023-09-10**.for **DNV GL**DNV GL local station: **Busan**Approval Engineer: **Tessa Biever**

Mårten Schei-Nilsson
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 Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-016071-2**
Certificate No: **TAF00000XR**

Product description

"DM-1433"

consisting of an aluminium foil (0.03 mm), Fibre glass (0.12 mm), and Buthyl Tape (0.8 mm).

Nominal thickness: 0.95 mm
Nominal weight: 1640 g/m².
Color: silver (outside), black (inside)
Max. organic content: 74.4 %

The product is manufactured by Sinpung Ind., Co., Busan, Korea.

Application/Limitation

Low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

Approved for use on non-combustible substrate with a greater thickness than 10 mm.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO FTP Code Part 5.

Maximum gross calorific value shall be documented separately where applicable, ref. SOLAS Chapter II-2 Reg. 5.3.2.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2017.

Test report Nos.:

- A2013-0281 dated 18 June 2013
- A2013-0410 dated 5 July 2013

Both from from "FILK" Fire Insurers Laboratories of Korea.

Test report no. TAK-2018-132092 dated 6 September 2018 from Korea Testing & Research Institute, Ulsan, Korea (max. organic content)

Tests carried out

Tested according to IMO 2010 FTP Code Part 2 and 5.

Marking of product

The product 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 "*Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)*", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL'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 DNVGL-CP-0338, Section 4.