DNV·GL

Certificate No:
MEDB00002FE

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the Surface materials and floor coverings with low flame-spread characteristics: floor coverings

with type designation(s)
Pietro Radici Floor Coverings

Issued to
Radici Pietro Industries & Brands S.p.A.
Cazzano Sant'Andrea BG, Italy

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/3.18c. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2017-11-12**.

Issued at **Høvik** on **2017-07-11**

DNV GL local station:
Milan

Approval Engineer:
Fryderyk Hoga

Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

NORWEGIAN ACCREDITATION PROD 019

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Product description
"Pietro Radici Floor Coverings"
articles as given in the appendix to this certificate.

Application/Limitation
Approved for use as low flame spread material, not generating excessive quantities of smoke nor toxic products in fire.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Approved for use as floor coverings on any low flame-spread floor covering, steel or non-combustible material.

DPF 700, ABETONE and MONTECARLO:
Approved for use as floor coverings on non-combustible substrate with a greater thickness than 12 mm.

Each product is to be supplied with its manual for application and maintenance.

Type Examination documentation
Test reports: See the appendix to this certificate.

Tests carried out
Test according to IMO FTPC Part 2 and Part 5 and in compliance with IMO 2010 FTP Code Ch. 8 and in accordance with IMO 2010 FTP Code part 2 and part 5 (DPF 700, ABETONE and MONTECARLO).

Marking of product
The product or packing is to be marked with name and address of the manufacturer, type designation, the Mark of Conformity and USCG approval number if applicable (see first page).

APPENDIX, REV. NO. 0

to EC Type – Examination Certificate MEDB00002FE

Product description

Article name	Composition	Weight g/m²	Thickness mm	Adhesive
DPF 700	100% PET	700 ± 10%	6 ± 1	Not used
REGENT	Pile 80% wool 20% polyamide Support: natural jute and polyester	2250 ± 10%	10 ± 1	Fastbond 3M S.p.A. (400 g/m²)
ABETONE	100% wool	2214 ± 15%	8.5 + 15% - 10%	Acquacol T (400 g/m²)
MONTECARLO	90% wool 10% polyester	2200 ± 15%	9 + 15% - 10%	Acquacol T (400 g/m²)
ABETONE JACQUARD (2200 – 3200)	100% wool	From 2200 to 3200 ± 10%	8 to 10 ± 0.5%	Acquacol T (200-400 g/m²)
ABETONE NAVY 8 (2600-3120)	80% wool 20% polyamide	From 2600 to 3120 ± 10%	10 ± 10%	Acquacol T (700 g/m²)
ELISEO	90% wool 10% polyester	2600 ± 10%	8.3 ± 10%	Acquacol T (400 g/m²)
CREMA 7	Pile 80% wool 20% polyamide Support: natural jute and polyester	1350 ± 8%	4 ± 0.5	Fastbond 3M S.p.A. (400 g/m²)

The following products have been tested for Gross calorific value according to IMO FTPC Part 5 Par. 3.1:
REGENT Calorific Value: 19156 KJ/kg equal to 43.1 MJ/m²
CREMA 7 Calorific Value: 24589 KJ/kg equal to 33.2 MJ/m²

The following products have been tested for Gross calorific value according to EN ISO 1716:2010:
DPF 700 Calorific Value: 22675 KJ/kg equal to 15.9 MJ/m²
ABETONE Calorific Value: 23345 KJ/kg equal to 51.7 MJ/m²
MONTECARLO Calorific Value: 20256 KJ/kg equal to 44.6 MJ/m²

Type Examination documentation

Test reports No.
737.4IM0080/03, 737.4IM0090/03, 737.4IM0100/03 dated 24 September 2003,
1079.4IM0080/01, PDP 9400 rev.2 dated 27 November 2001,
1079.4IM0100/01 dated 5 December 2001,
576.4IM0040/99 dated 7 December 1999,
276.4IM0080/02, 276.4IM0100/02 dated 29 March 2002,
587.4IM0080/02, 587.4IM0100/02 dated 4 July 2002,
765.4IM0080/03, 765.4IM0090/03, 765.4IM0100/03 dated 2 October 2003.
All from Laboratorio Prevenzione Incendi (LAPI), Italy.

Test reports No.
1999DG90TO/2 dated 16 April 1999and
96DG196TO dated 29 March 2002.
All from Registro Italiano Navale (RINA) Fire Protection Research Laboratory, Italy.

Test reports No.
0034\DC\TOX\16_1 dated 13 May 2016 (DPF 700),
0355\DC\REA\16_1, 0355\DC\REA\16_2 dated 09 May 2016 (DPF 700),
0035\DC\TOX\16 dated 13 May 2016 (Abetone),
0362\DC\REA\16_1, 0362\DC\REA\16_2 dated 11 may 2016 (Abetone),
0055\DC\TOX\16, 0599\DC\REA\16_1, 0599\DC\REA\16_2 dated 25 July 2016 (Montecarlo).
All from CSI, Italy.

Technical reports from manufacturer for Abetone and DPF700 both dated 23 May 2016 and for Montecarlo dated 27 July 2016.