



MARINE DIVISION

Certificate number: 12598/C0 BV

File number: ACE 01/094/10

Product code: 25011

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

OMERIN division silisol
SAINT ETIENNE - FRANCE

for the type of product

CABLES (LOW VOLTAGE)

0.6/1 kV
VARPREN MAX

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

IEC 60092-350/351/353, IEC 60228, IEC 60332-1, IEC 60332-3-22 Cat.A, IEC 60754-1/2, IEC 61034-1/2.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 13 Apr 2018

For BUREAU VERITAS,

At BV LYON, on 13 Apr 2013,

Jean-Marc Cabuzel



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

VARPREN MAX® is a Flame Retardant, Low Smoke and Halogen Free, Marine & Offshore Low Voltage cable for internal wiring of cabinet and switchboard.

1.1 - Specifications:

Rating Voltage:	0.6/1 kV according to IEC 60092-353
Temperature Class:	90°C
Flame Retardant:	IEC 60332-1 & IEC 60332-3-22 Cat.A
Halogen Free:	IEC 60754-1/2
Low Smoke:	IEC 61034-1/2

1.2 - Construction:

Conductor:	Plain copper - Class 5 according to IEC 60228
Insulation:	Halogen free cross-linked polyolefin - HF 90

1.3 - Product Range:

Type	Number of core	Cross section [mm ²]	Remarks
VARPREN MAX®	1	0.5 to 120	Flame retardant according to IEC 60332-1 and IEC 60332-3-22 Cat.A

2. DOCUMENTS AND DRAWINGS:

OMERIN: Product Specification, VARPREN MAX® and documents filed in ACE01/094/10.

3. TEST REPORTS:

OMERIN:

- In-house Test Reports dated 28 Nov. 2002 (witnessed by BV' Surveyor)
- In-house Test Reports No. FM080212-01/02/03/04 dated 12/02/2008 (witnessed by BV' Surveyor)
- In-house Test Report No. FM060902-02 dated 2007-03-02 (MULTIMAX CF - Tests on Conductors with HF90 Insulation).
- In-house Test Reports N°FM130206-01/02/03/04, dated 06/02/2013 witnessed by BV' Surveyor.
- In-house Test Reports N°FM130312-01/02, dated 12/03/2013, witnessed by BV' Surveyor.

4. APPLICATION / LIMITATION:

BUREAU VERITAS Rules for the Classification of Steel Ships.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The cables are to be supplied by **OMERIN Division Silisol** in compliance with the type and the requirements described in this certificate.
- 5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 - BV product certificate is required.

6. MARKING OF PRODUCT:

The cable shall be marked on the surface outer sheath, in a durable legible and visible manner, with the following information through the length of cable:

- Voltage grade,
- Cable symbol and Temperature Class,
- Applicable standard(s) to flame retardant,
- Number of conductors and conductor size,
- Manufacturer's name or trade mark, Year of manufacture.

7. OTHERS:

- 7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the cables at any time and that: **OMERIN Division Silisol** will accept full responsibility for informing shipbuilders, ship-owners or their sub-contractors of the proper methods of use and general maintenance of the cables and the conditions of this approval.
- 7.2 - This Certificate supersedes the Type Approval Certificate N°12598/B0 BV issued on 16/02/2008 by the Society.

*** END OF CERTIFICATE ***