

MARINE DIVISION

Certificate number: 18846/C0 BV File number: PPE 21954/02 Product code: 5802H

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

PG PRODUCTS LTD.

North Walsham - UNITED KINGDOM

for the type of product

PROTECTIVE CLOTHING FOR FIREMAN'S OUTFITS

Flameguard Mk3 Suit

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- SOLAS 74 as amended, Regulation II-2/10
- IMO Resolution MSC.98(73) 3 (FSS Code)

- EN ISO 11612:2008

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: 01 Aug 2017

For BUREAU VERITAS,

At BV LONDON, on 01 Aug 2012,

Spencer Yule



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

<u>1. PRODUCT DESCRIPTION</u>

Flameguard Mk 3 Suit

Design

- The Flameguard Mk3 suit is a two piece garment constructed in aluminised modacrylic cotton.

- The jacket has a stand up collar with modacrylic loop pile lining, elasticated cuffs, and is closed by 50 mm wide touch and close fastening to the front and neck.

- The trousers have 25 mm webbing bracers with adjusters to facilitate fitting a wide range of wearers. The lower leg is elasticated.

- Sizes: medium, large and extra large.

2. DOCUMENTS AND DRAWINGS

- Technical file dated 01/04/2012

- Donning instructions for use and maintenance

- Labelling

No departure from the above documents shall be made without the prior consent of the Society named on this certificate. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

- Protective clothing type-tested according to EN 11612:2008.

- Test reports N° 30/05883/1-2-3-4 issued on 23/11/2011 by BTTG Fire Technology Services.

- The outer material was type-tested for water penetration acc. to EN 20811 and achieved a water hydrostatic head of 2 metres (the maximum).

4. APPLICATION / LIMITATION

4.1 Approved for use as protective clothing for fire-fighter complying with the provisions of the Fire Safety Systems Code. The two piece garment composed by a jacket and trousers, both must be worn together and must be used in combination with approved boots, gloves and helmets together to provide the required protection.

In addition to the fire suit, the following personal equipment can be supplied:

- Safety Helmet to EN397 with visor and neck curtain,

- Medium Weight Rubber Gloves to EN388,
- Wellington Boots to EN20345.

They will have to be acceptable to the National Authority of the country in which the ship is registered.

4.2 Number of full protective clothings and use on board ships to comply with SOLAS Convention including amendments to the satisfaction of the Administration.

4.3 Use and restrictions according to manufacturer's instructions.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be manufactured, examined and tested by the manufacturer in accordance with the approved type described in this certificate and Bureau Veritas Rules and Regulations stated on the front page of this certificate.

5.2 Production sites are to be recognized by Bureau Veritas as per NR 320 for HBV products. To this end, the manufacturer has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

5.3 The manufacturer has declared to Bureau Veritas that the products detailed in this certificate are manufactured at PG Products Limited, England.

5.4 Each protective clothing is to be supplied with its instructions for use and maintenance.

5.5 Bureau Veritas certificate is not required for the product to be fitted on board units to be classed with Bureau Veritas.

6. MARKING OF PRODUCT

Each piece of the protective clothing shall be marked with the following information:

- Manufacturer's name or logo;
- Size designation;
- Year of manufacture;
- Pictogram and levels of performance*;
- Number of the specific European Standard i.e. EN 11612:2008.
- * Levels of the whole garment: A1 B1 C4
- A1 for limited flame spread;
- B1 for convective heat;
- C4 for radiant heat.

7. OTHERS

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fittings and general maintenance of the protective clothing and of the conditions of this approval.

This certificate supersedes the Type Approval Certificate N° 18846/B0 BV issued on 14/09/2011 by the Society.

*** END OF CERTIFICATE ***