# **EC Certificate** Type Examination (Module B)



This is to certify that:

Germanischer Lloyd, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as amended, subject to any conditions in the schedule attached hereto.

Certificate No.

94 696 - 10 HH

**Applicant** 

PG Products Ltd.

3 Folgate Road Lyngate Industrial Estate North Walsham NR28 0AJ, UNITED KINGDOM

Manufacturer

PG Products Ltd.

3 Folgate Road Lyngate Industrial Estate North Walsham NR28 0AJ, UNITED KINGDOM

**Product Description** 

Firefighter's outfit: protective clothing (close proximity clothing).

**Product Name** 

Flameguard Plus marine aluminised two layer firefighter's suit comprising jacket

and trousers.

Trade Name

Flameguard Plus

**Specified Standards** 

EN 469: 2005 including A1: (2006).

**Related Directive** 

2009/26/EC

**Equipment Section** 

Fire protection

Annex A.1 Item No.

A.1/3.3

Date of Issue

2010-07-27

**Expiry Date** 

2015-07-26

**Germanischer Lloyd** 

Notified Body No.: 0098

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Nils Wegener



Certificate No: 94 696 - 10 HH Date of Issue: 2010-07-27

## Schedule of Approval

### **Approval Documentation**

Test Reports:

Ref. 30/04842 dated 7th April 2010 with supplement Ref. 30/04842/1 dated 28th June 2010 and Ref. 30/05102 dated 29th June 2010 issued by BTTG Fire Technology Services, Altrincham, United Kingdom.

#### **Technical Data**

Flameguard Plus marine aluminised two layer firefighter's suit comprising jacket and trousers.

Outer layer: aluminised Modacrylic 55% / Cotton 45% FR, 360g/m<sup>2</sup>

Inner Layer: Modacrylic / Cotton loop pile (loop pile facing the body)

The jacket has a high, lined collar, to protect the neck and give a good overlap with a helmet visor and neck curtain. The trousers have a high waist and are fitted with H-style adjustable bracers.

#### The specimen was tested as follows:

Flame spread to EN ISO 150525: 2002 Procedure A	Pass
Heat transfer –flame- to EN 367: 1992	Level 2
Heat transfer –radiation- to EN ISO 6942: 2002, Method B at 40kW/m <sup>2</sup>	Level 2
Residual strength to EN ISO 6942: 2002, Method A at 10kW/m <sup>2</sup>	Pass
Heat resistance to ISO 17493:2000 at 180°	Pass
Tensile strength (outer material) to EN ISO 1421-1:1998 Method 1	Pass
Tensile strength (seamed outer) to EN ISO 13935-2:1999	Pass
Tear strength (outer material) to EN ISO 4674-1:2003, Method B	Pass
Surface wetting to EN 24920: 2002	Pass
Resistance to penetration by liquid chemicals to ISO 6530: 2005	
40% NaOH	Pass
36% HCI	Pass
30% H₂SO₄	Pass
100% o-xylene	Pass
Resistance to water penetration (metallised fabric) to EN 20811: 1992 (1996)	Level 2
Resistance to water penetration (seamed specimen) to EN 20811: 1992 (1996)	Level 1
Water vapour resistance to EN 31092: 1993	Level 1

Ergonomics was assessed in accordance with EN 469: 2005 Annex D with satisfactory results.

Each part of the suit shall be marked with the levels of performance and pictogram as per EN469, cleaning instructions and with the EC mark of conformity.

### Instructions for use:

Storage, handling, cleaning, use and restrictions for use to be in accordance with the manufacturer's instructions.



Certificate No: 94 696 - 10 HH Date of Issue: 2010-07-27

#### Remarks

The protective clothing shall be worn together with approved boots, gloves and helmet in accordance with the directive 2009/26/EC Annex A.1.

Limitations on the acceptance or use of the product

none

#### Notes:

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform Germanischer Lloyd, as the Notified Body, of any modifications or changes to the approved equipment.

Should the specified regulations or standards be amended during the validity of this certifiate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



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.