



Confidential Report

Our Ref: 23/60959D/04/23





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.
Telephone: +44 (0) 113 259 1999
Email: onestopshop@bttg.co.uk
Website: www.bttg.co.uk

Date: 12 May 2023

Our Ref: 23/60959D/04/23

Your Ref: ---

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Client: Ludvig Svensson AB

Bangatan 8
811 82 Kinna
Sweden

Job Title: Fire Test on One Fabric Sample

Clients Order Ref: --

Date of Receipt: 26 April 2023

Date Test Started: 12 May 2023

Description of Sample: One sample of fabric, which was referenced by the client as;
Grain NordShield, stated to be >99% Trevira CS, <1% NordShield BioLayr

Work Requested: We were asked to make the following fire test:

IMO FTP Code 2010:Part 7

- * subcontracted test, UKAS accredited
- ** subcontracted test, EN ISO/IEC 17025 accredited
- *** not UKAS accredited



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Note: This report relates only to the items tested.

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Product Description

Company Name	AB Ludvig Svensson
Type of Material, i.e. Curtain, Drape, etc.	Curtain Fabric
Name and/or Identification of the Product Tested	Grain NordShield
Mass per Unit Area (g/m ²)	190
Thickness (mm)	--
Colour and Tone (i)	Yellow
Quantity and Number of Any Coating	NordShield BioLayr
Method and Quantity of Fire-Retardant Treatment	Permanently flame retardant fibre
Materials of the Product and its Composite Ratio (ii)	>99% Trevira CS, <1% NordShield BioLayr
Composition of Weave (iii)	Weave
Density (Number/Inch) the Number of Threads per Inch in both warp and weft; and	Warp: 55, Weft: 53
Yarn Number Count	Nm 60/2 & Nm 27/2

- (i) If the product has a pattern, the representative colour shall be described.
- (ii) Such as wool, nylon, polyester, etc.
- (iii) Such as plain, weave, twilled.





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FIRE TESTS ACCORDING to IMO FTP Code 2010:Part 7 Test for Vertically Supported Textiles and Films

Cleaning Procedure

The sample received no pre-treatment as the fabric was stated to be inherently flame retardant.

Conditioning

The sample was conditioned for not less than 24 hours in the standard atmosphere for conditioning textiles of $20 \pm 5^\circ\text{C}$ and $65 \pm 5\%$ R.H.

Procedure

The sample was tested in accordance with IMO FTP Code 2010:Part 7*. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

A 40mm high propane gas flame was applied to the edge of 5 warp and 5 weft specimens for 15 seconds.

The after-flame time, length of char, existence of surface flashing and ignition of cotton waste from drops were recorded.

*Deviation from standard

The test was carried out in a test enclosure to different dimensions to that specified in IMO FTP Code 2010:Part 7. The dimensions of the test enclosure are 1820mm wide x 1220mm deep x 1950mm. The test was carried out in a draught free enclosure.



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Requirements

The Performance Criteria for Curtains and Drapes states that: Products which show any of the following characteristics obtained by the fire test in appendix 1, shall be considered unsuitable for use as curtains, drapes or free-hanging fabric product for use in rooms containing furniture and furnishings of restricted fire risk as defined in the relevant regulations of chapter II-2 of the Convention:-.

1. An after-flame time greater than 5 sec for any of the 10 or more specimens tested with surface application of the pilot flame.
2. Burn through to any edge of any of the 10 or more specimens tested with surface application of the pilot flame.
3. Ignition of cotton wool below specimen in any of the 10 or more specimens tested.
4. An average char length in excess of 150mm observed in any of the 10 or more specimens tested by either surface or edge ignition.
5. The occurrence of a surface flash propagating more than 100mm from the point of ignition with or without charring of the base fabric.

If it is found that either or both of the batches of five specimens cut in both warp and weft directions fail to meet one or more of the criteria specified in subparagraphs .1 to .3 and .5 above because of poor performance of only one of the five specimens tested, one complete retest of a similar batch is permitted. Failure of the second batch to meet any of the criteria shall provide the basis for rejection of the fabric for use.

Results

	After flame time (s)		Char length (mm)		Flaming to edge (yes or No)		Ignition of Cotton Wool from Flaming Drops (Yes or No)		Surface Flashing (Yes or No), if yes, Propagation Length (mm)	
	Warp	Weft	Warp	Weft	Warp	Weft	Warp	Weft	Warp	Weft
	0	0	62	47	No	No	No	No	No	No
	0	0	73	45	No	No	No	No	No	No
	0	0	81	42	No	No	No	No	No	No
	0	0	60	50	No	No	No	No	No	No
	0	0	58	51	No	No	No	No	No	No
Mean	0	0	67	47						



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Comment

The results indicate the sample meets the requirements according to IMO 2010 FTP Code, Part 7.

Where required to make a judgement to any pass/fail criteria an estimation of uncertainty of measurement has been taken into account. Under our Policy we have used a non-binary decision rule.

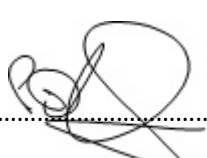
See our decision rules Policy (<https://www.bttg.co.uk/about-us/decision-rules-policy/>) for further information.

Uncertainty Budget

The overall uncertainty budget IMO FTP Code 2010:Part 7 is as follows:-

Measurements: $\pm 2\text{mm}$
Duration of Flaming: ± 2 seconds

Reported by:  B Bland, Technical Customer Service Officer

Countersigned by:  P Doherty, Manager

Enquiries concerning this report should be addressed to Customer Services.



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