



# Confidential Report

**Our Ref: 23/60380B/11/22**





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.  
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Date: 30 November 2022

Our Ref: 23/60380B/11/22  
Your Ref: 0559904

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**Client:**

**Kvadrat A/S**

Lunbergsvej 10  
8400 Ebeltoft  
Denmark

**Job Title:**

Fire Test on One Fabric Sample

**Clients Order Ref:**

0559904

**Date of Receipt:**

16 November 2022

**Date Test Started:**

25 November 2022

**Description of Sample:**

One sample of fabric, which was referenced by the client as;  
Heather, stated to be 97% new wool, 3% recycled nylon

**Work Requested:**

We were asked to make the following fire test:

IMO FTP Code 2010:Part 8

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

Note: This report relates only to the items tested.



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Client: **Kvadrat A/S**

### Product Description

Company Name	<b>Kvadrat A/S</b>
<b>FABRIC</b>	
Type of Furniture, e.g., Seat, Sofa, Office Chair, etc.;	<b>Upholstery Fabric</b>
Name and/or Identification of the Product Tested	<b>Heather</b>
Materials of the Product and its Composite Ratio (i)	<b>97% new wool, 3% recycled nylon</b>
Composition of Weave (ii)	<b>Devon</b>
Density (Number/Inch) the Number of Threads per Inch in both warp and weft; and	<b>Warp: 40, Weft: 22</b>
Yarn Number Count	<b>Warp: 28/2NM, Weft: 1/9NM</b>
Thickness (mm)	<b>1-2mm</b>
Mass per Unit Area (g/m <sup>2</sup> )	<b>415 g/m<sup>2</sup></b>
Colour and Tone (iii)	<b>643</b>
Method and Quantity of Fire Retardant Treatment	<b>None</b>
<b>FILLINGS</b>	
Material (Name of Manufacturer, Type Designation)	
Type of Filling Material (eg. Foam, Polyester Fibre etc.)	
Weight per Unit Volume (kg/m <sup>3</sup> )	
Method and Quantity of Fire Retardant Treatment	

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



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## Testing to IMO FTP Code 2010 : Part 8 Test for Upholstered Furniture

### Conditioning

Immediately prior to testing the samples was placed in indoor ambient conditions for 72 hours and then conditioned in a standard atmosphere of  $23\pm 2^{\circ}\text{C}$  temperature and  $50\pm 5\%$  relative humidity for at least 16 hours.

The samples were tested in a room of volume  $25\text{m}^3$  and  $18^{\circ}\text{C}$ .

### Procedure

The samples was tested in accordance with IMO FTP Code 2010:Part 8 using ignition sources 0 and 1. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The sample was tested over non-fire retardant polyurethane foam with a density of approximately  $20\text{-}22\text{kg/m}^3$ .

### Requirements

Ignition Source 0 No progressive smouldering or flaming within 1 hour of the placement of the cigarette.

Ignition Source 1 All progressive smouldering and flaming to cease within 120 sec of removal of the burner tube.

### Cigarette Specification (Source 0)

Dimensions (mm)	69mm x 8.0mm
Mass (g)	0.85
Smouldering Rate (mins/secs)	10m 03s



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## Results

### Cigarette Test – Source 0

Specimen No.	1	2
Extinction Time (smouldering) (min)	DNP	DNP
Time of cover split	DNS	DNS
Melting (Yes/No)	No	No
Dripping (Yes/No)	No	No
Charring (Yes/No)	Yes	Yes
Progressive Smouldering (Yes/No)	No	No
Observations	DNP DNS	DNP DNS
Pass/Fail	PASS	PASS

**Result of the Cigarette Test: Pass**

### Propane Flame Test – Source 1

Specimen No.	1	2
Time of Ignition (s)	4	4
Extinction time of flames after removal of burner (s)	1	1
Time to Cover Split (s)	DNS	DNS
Melting (Yes/No)	No	No
Dripping (Yes/No)	No	No
Charring (Yes/No)	Yes	Yes
Progressive smouldering (Yes/No)	No	No
Observations:	DNS	DNS
Pass/Fail	PASS	PASS

**Result of the Flame Test: Pass**

#### Acronym

DNP – Did not propagate  
 ES – Escalating smouldering  
 BTE – Burnt to extremities

EC – Escalating combustion  
 DNS – Material did not split

ME – Manually extinguished  
 DNO – Did not observe time of event





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### Comment

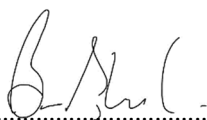
In our opinion, based on the test carried out on the sample supplied; the results indicate that the sample meets the requirements according to IMO FTP Code 2010:Part 8.

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

Measurements:  $\pm 2\text{mm}$   
Timings:  $\pm 2$  seconds.

Reported by:  B Bland, Technical Customer Services Officer

Countersigned by:  P Doherty, Manager

Enquiries concerning this report should be addressed to Customer Services.

