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Date: 17 December 2018

Our Ref: 55831-1-1  
Your Ref: -

Page: 1 of 4

Kvadrat A/S  
Lundbergsvej 10  
8400 Ebeltoft  
Denmark

Job Title: Cigarette And Match Test

Client's Order No: -

Date of Receipt: 10 December 2018

Date of Test Start: 17 December 2018

Description of Sample(s): One sample identified as follows was received for testing:

Atom, stated to be 90% new wool, 8% nylon, 2% polyester, worsted

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

Testing to Schedule 4, Part 1, "The Cigarette Test" and Schedule 5, Part 1, "The Match Test" of The Furniture and Furnishings (Fire) (Safety) Regulations 1988 S.I. No. 1324 (as amended by SI 1989 No. 2358, SI 1993 No. 207 & SI 2010 No. 2205), using BS 5852:Part 1:1979



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## Kvadrat A/S

Sample was identified as follows:

Atom, stated to be 90% new wool, 8% nylon, 2% polyester, worsted

Testing to Schedule 4, Part 1, "The Cigarette Test" and Schedule 5, Part 1, "The Match Test" of The Furniture and Furnishings (Fire) (Safety) Regulations 1988 S.I. No. 1324 (as amended by SI 1989 No. 2358, SI 1993 No. 207 & SI 2010 No. 2205), using BS 5852:Part 1:1979

### Pre-Treatment

The material was subjected to a water soak according to BS 5651: 1978, as modified by the above regulation.

### Conditioning

All materials used were conditioned in the environment specified in Clause 7 of BS 5852: Part 1: 1979 "Methods of test for the ignitability by smokers materials of upholstered composites for seating."

### Testing

The material was tested according to BS 5852: Part 1: 1979 "Methods of test for the ignitability by smokers materials of upholstered composites for seating."

The results of BS 5852: Part 1: 1979 relate only to the ignitability of the combination of materials under the particular conditions of test, they are not intended as a means of assessing the full potential fire hazard of the materials in use.

### Cigarette Test – Source 0

The sample was tested over non-fire retardant polyurethane foam with a density of approximately 20-22 kg/m<sup>3</sup>.

### Butane Flame Test – Source 1

The sample was tested over non-fire retardant polyurethane foam with a density of approximately 20-22 kg/m<sup>3</sup>.

The results for all tests are given in the table(s) on the following page(s).



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Page: 3 of 4

Kvadrat A/S

## RESULTS

Sample Ref: Atom, stated to be 90% new wool, 8% nylon, 2% polyester, worsted

### Cigarette Test – Source 0

Specimen No.	1	2
Time of Ignition (min)	--	--
Time of Flame Extinction (min)	23	23
Time to cover split (min)	DNS	DNS
Melting	No	No
Dripping	No	No
Charring	Yes	Yes
Progressive smouldering on final inspection	No	No

#### Requirements:

No flaming or progressive smouldering within a period of 1 hour from placement of the cigarette.

Result of the Cigarette Test: PASS

### Butane Flame Test – Source 1

Specimen No.	1	2
Time of Ignition (secs.)	7	8
Time of Flame Extinction (secs.)	1	1
Time to cover split (secs.)	DNS	DNS
Melting	No	No
Dripping	No	No
Charring	Yes	Yes
Progressive smouldering on final inspection	No	No

#### Requirements:

Duration of flaming from removal of source not greater than 120 seconds. Duration of smouldering from removal of source not greater than 15 mins.

Result of the Butane Flame Test: PASS

#### Abbreviations

DNP – Did not propagate  
ME – Manually extinguished  
DNS – Material did not split  
BTE – Burnt to extremities

EC – Escalating combustion  
ES – Escalating smouldering  
DNO – Did not observe time of event



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Page: 4 of 4

## Kvadrat A/S

### Conclusion

The sample meets the flammability requirements of Schedule 4, Part 1, "The Cigarette Test" of the Furniture and Furnishings (Fire) (Safety) Regulation 1988 (as amended) S.I. No. 1324.


The sample meets the flammability requirements of Schedule 5, Part 1, "The Match Test" of the Furniture and Furnishings (Fire) (Safety) Regulation 1988 (as amended) S.I. No. 1324.

Note: This report relates only to the samples submitted and as described in the report.

Uncertainty of measurement has not been taken into account when presenting the test result. The overall uncertainty budget for BS 5852: Part 1: 1979 is as follows:

Measurements:  $\pm 2$  mm  
Timings:  $\pm 2$  seconds

Reported by:   
B Bland  
Fire Technician

Countersigned By:   
P Doherty  
Operational Head

Enquiries concerning this report should be addressed to Customer Services.



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