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Date: 20 September 2018

Our Ref: 55428-1
Your Ref: -

Page: 1 of 6

Client: Ludvig Svensson AB
511 82 Kinna
Sweden

Job Title: BS EN 1021 Parts 1 & 2

Client's Order No: -

Date of Receipt: 14 September 2018
Date of Test Start: 19 September 2018

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

Easy, stated to be 85% wool, 15 Polyamide, Weight 330g/m2

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

BS EN 1021-1:2014 and BS EN 1021-2 2014



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Page: 2 of 6

Ludvig Svensson AB

Sample was identified as follows:

Easy, stated to be 85% wool, 15 Polyamide, Weight 330g/m²

FIRE TESTS ACCORDING TO BS EN 1021-1:2014

Assessment of the ignitability of upholstered furniture. Part I. Ignition Source 0: Smouldering cigarette

Pre-Treatment

The sample was water-soaked and dried in accordance with BS EN 1021 Part 1:Annex D.

Conditioning

After drying the sample was conditioned for at least 16 hours at a temperature of 23±2°C and relative humidity of 50±5%.

The sample was tested in a room of volume 25m³ and 20°C.

Procedure

The test was carried out in accordance with BS EN 1021-1:2014. 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 20-22 kg/m³.

Tests were made using ignition source 0.

Requirements

The specimens shall not:-

Smouldering Criteria

- a) display escalating combustion requiring active extinction.
- b) smoulder or burn until it is essentially consumed within the test duration.
- c) smoulder or burn to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) smoulder for more than one hour.
- e) on final examination, show evidence of progressive smouldering.



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Page: 3 of 6

Ludvig Svensson AB

Requirements (continued)

Flaming Criteria

- a) show evidence of flaming initiated by a smouldering source.

Results

	Cigarette			Comments
	1	2	3 ¹	
Smouldering Criteria (Yes/No)				
Unsafe escalating combustion	No	No	-	
Test assembly consumed	No	No	-	
Smoulders to extremities	No	No	-	
Smoulders through thickness	No	No	-	
Smoulders more than 1 hour	No	No	-	
In final examination, presence of progressive smouldering	No	No	-	
Ignitability Performance (Yes/No)				
Occurrence of flames	No	No	-	
Ignition / Non Ignition (I/NI)	NI	NI	-	

¹ Results for cigarette 3, only if applicable.

Note

The test results 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.

Comments

A NI designation indicates that the sample meets the performance requirements of BS EN 1021-1.



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Page: 4 of 6

Ludvig Svensson AB

FIRE TESTS ACCORDING TO BS EN 1021-2:2014

Assessment of the ignitability of upholstered furniture. Part 2. Ignition Source 1: Match flame equivalent.

Pre-Treatment

The sample was water-soaked and dried in accordance with BS EN 1021 Part 2:Annex D.

Conditioning

The sample was water-soaked and dried in accordance with Annex D of this standard. After drying the sample was conditioned for at least 16 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$.

The sample was tested in a room of volume 25m^3 and 20°C .

Procedure

The test was carried out in accordance with BS EN 1021-2:2014. 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 $20\text{-}22\text{ kg/m}^3$.

Tests were made using ignition source 1.

Requirements

The specimens shall not:-

Smouldering Criteria

- a) display escalating combustion requiring active extinction.
- b) smoulders until it is essentially consumed within the test duration.
- c) smoulder to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) smoulder for more than one hour.
- e) show evidence of charring, other than discolouration, for more than 100mm in any direction apart from the nearest part of the original position of the source.



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Page: 5 of 6

Ludvig Svensson AB

Requirements (Continued)

Flaming Criteria

- display escalating combustion requiring active extinction.
- burns until it is essentially consumed within the test duration.
- burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
- exhibit any flaming for more than 120 seconds after removal of the burner tube.

Results

	Match Flame Equivalent		Comments
	1	2	
Smouldering Criteria (Yes/No)			
Unsafe escalating combustion	No	No	
Test assembly consumed	No	No	
Smoulders to extremities	No	No	
Smoulders through thickness	No	No	
Smoulders more than 1 hour	No	No	
In final examination, presence of progressive smouldering	No	No	
Ignitability Performance (Yes/No)			
Unsafe escalating combustion	No	No	
Test assembly consumed	No	No	
Flames to extremities	No	No	
Flames through thickness	No	No	
Flames longer than 120 seconds	No	No	
Ignition / Non Ignition (I/NI)	NI	NI	

Note

The test results 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.



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Page: 6 of 6

Ludvig Svensson AB

Comments

An NI designation indicates that the sample meets the performance requirements of BS EN 1021-2.

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

The overall uncertainty budget for both BS EN 1021: Part 1 and 2:2014 is as follows:-

Timings: ± 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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