



Confidential Report

Our Ref: 56164-2-2



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Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 21 March 2019
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Client: Kvadrat A/S
Lundbergsvej 10
8400 Ebeltoft
Italy.

Job Title: Fire Test on One Sample of Fabric

Client's Order No: --

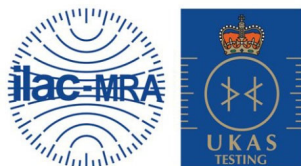
Date of Receipt: 15 March 2019

Description of Sample(s): One sample of fabric, referenced Clay 003 by Sahco

Work Requested: We were asked to make the following test(s):
BS EN 1021-1:2014 and BS EN 1021-2 2014

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

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



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Client: **Kvadrat A/S**

FIRE TESTS ACCORDING TO BS EN 1021-1:2014

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

Date of Test: 21 March 2019

Pre-Treatment

The sample did not have a flame retardant treatment therefore it was not subjected to a water soak pre-treatment

Conditioning

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 18°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 $20\text{-}22\text{ kg/m}^3$. A cigarette having a mass of $1\pm 0.2\text{g}$ was used.

Tests were made using ignition source 0.

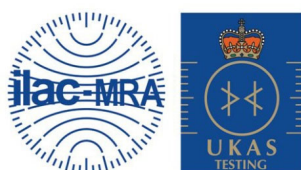
Requirements

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.

Flaming Criteria



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- 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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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 18°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 $20\text{-}22\text{ kg/m}^3$.

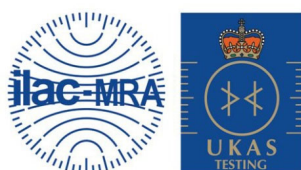
Tests were made using ignition source 1.

Requirements

The specimens shall not:-

Smouldering Criteria

- display escalating combustion requiring active extinction.
- smoulders until it is essentially consumed within the test duration.
- smoulder to the extremities of the specimen, or through the full thickness, within the duration of the test.
- smoulder for more than one hour.
- 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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Requirements (Continued)

Flaming Criteria

- a) display escalating combustion requiring active extinction.
- b) burns until it is essentially consumed within the test duration.
- c) burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) 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.



TESTING • CERTIFICATION • AUDITING

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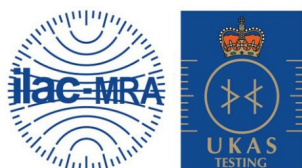
Comments

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

Reported by:.....
B Bland
Laboratory Technician

Countersigned By:.....
P Doherty
Manager

Enquiries concerning this report should be addressed to Customer Services.





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Uncertainty Budget - Annex

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

Timings: ± 2 seconds.

