

FLAMMABILITY TEST REPORT

Report No.: LEHTX00481890 Date Received: 03/04/09 Date Tested: 09/04/09 Date Issued: 09/04/09

Company Name & Address: FLAMEN TEK LIMITED
FIRE PREVENTION CONSULTANTS
FOX FARMHOUSE
SHADINGFIELD
BECCLES
SUFFOLK
NR34 8DD


Contact Name: DONNA BARBER

Sample Details

Sample quality / Colour: Remix col. Red / Orange
Job reference number: KV0287.09 - 21114
End Use: Non-domestic Upholstery
Supplier: Kvadrat Holding
Quoted fibre composition: 90% new wool / 10% nylon
Fabric type: Woven
Customers sample description: Woven upholstery material treated with a DURAFLAM@Flame Retardant formulation by Fabric Flare Limited
Sample description: Red coloured fabric with a flame retardant backcoat

Test Method	Pre Treatment	Requirement	Result
BS EN 1021-1:2006 (Smouldering Cigarette)	Watersoaked as Annex D of BS EN 1021-1,2:2006	As BS EN 1021-1:2006 (Smouldering Cigarette)	NI (PASS)
BS EN 1021-2:2006 (Match Flame Equivalent)	Watersoaked as Annex D of BS EN 1021-1,2:2006	As BS EN 1021-2:2006 (Match Flame Equivalent)	NI (PASS)
BS 5852:2006 Clause 11 (upholstery composite) Ignition source 5	Watersoaked as Annex E of BS 5852:2006	As BS 5852:2006 Clause 11 (upholstery composite) Ignition source 5	NI (PASS)
The upholstery composite tested meets the performance requirements for resistance to ignition as detailed in the Medium Hazard (Cigarette, Match & Crib 5) category of Table 1 of BS 7176: 2007.			

Note: The customer requested that CMHR foam with an approximate density 35 kg/m³ be used as the filling material


STEVEN OWEN
(Chemical Technologist)

CAROLE SPOWART
(Flammability Technician)

ANDREW WHITE
(Quality Manager)

SIMON CHIEE
(Analytical Lab Manager)

FLAMMABILITY TEST REPORT

Test Specification

Test method: BS EN 1021-1:2006 (Smouldering Cigarette)
BS EN 1021-2:2006 (Match Flame Equivalent)

Foam Specification

Supplier / grade: Vitafoam / CMHR 35 (As requested by the customer)
Size: 450 x 300 x 75mm (back) & 450 x 150 x 75mm (seat)
Density / Hardness: 33-36kg/m³ / 90-120

Pre-treatment / Durability procedure

Watersoaked as Annex D of BS EN 1021-1:2006 / BS EN 1021-2:2006 then line dried.

Conditioning

Prior to testing: At least 16 hours in an atmosphere having a temperature of 23±2°C and a relative humidity of 50±5%

At time of testing: Temperature between 10°C. and 30°C. and a relative humidity between 15% and 80%.

Test Results

BS EN 1021-1:2006 (Smouldering Cigarette). Test 1:	The cigarette failed to burn its complete length, there was no flaming or progressive smouldering. (Pass)
BS EN 1021-1:2006 (Smouldering Cigarette). Test 2:	The cigarette failed to burn its complete length, there was no flaming or progressive smouldering. (Pass)
BS EN 1021-2:2006 (Match Flame Equivalent). Test 1:	Flaming ceased 5 seconds after removal of the burner, there was no progressive smouldering. (Pass)
BS EN 1021-2:2006 (Match Flame Equivalent). Test 2:	Flaming ceased 4 seconds after removal of the burner, there was no progressive smouldering. (Pass)
BS EN 1021-2:2006 (Match Flame Equivalent). Test 3:	Flaming ceased 5 seconds after removal of the burner, there was no progressive smouldering. (Pass)
<i>"The above test results relate only to the ignitability of the combinations 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."</i>	

FLAMMABILITY TEST REPORT

Test Specification

Test method: BS 5852:2006 Clause 11 (upholstery composite) Ignition source 5

Foam specification

Supplier / grade: Vitafoam / CMHR 35 (As requested by the customer)
Size: 450 x 450 x 75mm (back) & 450 x 300 x 75mm (seat)
Density / Hardness: 33-36kg/m³ / 90-120

Pre-treatment / Durability procedure

Watersoaked as Annex E of BS 5852:2006 then line dried.

Conditioning

Prior to testing: At least 72 hours in ambient indoor conditions, then at least 16 hours in an atmosphere having a temperature of 20±5°C and a relative humidity of 50±20%

At time of testing: Temperature between 16°C. and 30°C. and a relative humidity between 20% and 70%.

FLAMMABILITY TEST REPORT

Test Results (Cont.)

Pass / Fail Criteria	Initial test	Repeat test
<i>"The following test results relate only to the ignitability of the combination of upholstery composites (BS 5852: 2006, Clause 11) under the particular conditions of test stated; they are not intended as a means of assessing the full potential fire hazard of the materials or products in use";</i>		
Progressive smouldering failure		
Externally detectable amounts of smoke, heat or glowing 60 minutes after crib ignition	No	No
Escalating smouldering behaviour rendered the test unsafe to continue and required forcible extinction	No	No
Smouldering essentially consumed the test specimen within the duration of the test / Smouldering reached the extremities of the test specimen (Other than the top of the vertical part of the test specimen) within the duration of the test	No	No
Flaming failure		
The test specimen continued to flame for more than 10 minutes after the ignition of the crib	No	No
Escalating combustion behaviour rendered the test unsafe to continue and required forcible extinction	No	No
Flaming essentially consumed the test specimen within the duration of the test	No	No
Flaming reached the extremities of the test specimen (Other than the top of the vertical part of the test specimen) within the duration of the test	No	No
Debris from the test specimen caused an isolated floor fire that continued to flame for more than 10 minutes after the ignition of the crib	No	No
Final examination		
Progressive smouldering was observed when the sample was dismantled	No	No
Evidence of charring within the filling (other than discolouration) more than 100mm in any direction, apart from upwards, from the nearest part of the original position of the ignition source	No	No
Comment		
Time to extinction of flames after crib ignition	4 minutes 33 seconds	5 minutes 31 seconds
Time to extinction of crib glowing after crib ignition	5 minutes 26 seconds	6 minutes 59 seconds
Time to extinction of smoke after crib ignition	5 minutes 49 seconds	7 minutes 28 seconds
Maximum damage length / width (Base)	400mm / 69mm	400mm / 73mm
Maximum damage length / width (Back)	64mm / 41mm	75mm / 36mm
Test Result	NI	NI
Ignitability performance index: "Clause 11 I/S"		