



Testing. Advising. Assuring.

Test report No. 2014-1559

for applying of a required "Verwendbarkeitsnachweis"
issued 11.06.2014

Applicant: Camira Fabrics Ltd,
Meltham Mills,
Meltham Mills Road
Meltham
West Yorkshire
HD9 4AY

Date of order: 09.05.2014
Date of sampling: *no official sampling of the specimen by a representative of Exova Warringtonfire, Frankfurt*
Date of arrival: 20.05.2014
Date of test: 03.06.2014

Order

Testing of the flammability (building class B1) according to DIN 4102-1 (May 1998)

Description / designation of the test object

Trade name: Xtreme Plus

Description of the relevant test procedure

DIN 4102 part 1 (Mai 1998)

This test report did not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the "Verwendbarkeitsnachweis".

1. Description of the test material

1.1 Details of the customer:

Tradename:	Xtreme Plus
Sample material:	Seating fabric
Material type:	Woven fabric
Composition:	100% Polyester
Production technique:	Woven
Colour:	Havana YS009
Run Number:	174915/1203
Manufacturer:	Camira fabrics Ltd
Intended end use of product:	Seating fabric

1.2 At the specimen preparation by Exova Warringtonfire, Frankfurt determined values:

Fabric sample

Colour:	black
Thickness:	ca. 0,8 mm
Weight per unit area:	309 g/m ²

Testing after storing 14- days under climatic conditions (23°C / 50 % rel. humidity).

2. Test results

2.1.1 Brandschachtprüfung according to DIN 4102-1

Sample A: Material tested in production direction

Sample B: Material tested crosswise to the production direction

Test results of the Brandschacht tests part 1						
line no.		Measurements test sample				
			A	B	C	D
1	<u>no. test arrangement according to DIN 4102 part 15, table 1</u>		1	1		
2	<u>flame height max. over lower sample edge</u> time ¹⁾	cm	30	30		
		min : s	0:05	9:35		
3	<u>ascertainties on the front side</u> Flaming/glowing time ¹⁾	min : s	0:13	0:05		
4	<u>melting / burning through</u> time ¹⁾	min : s	0:174	0:07		
5	<u>ascertainties on the back side</u> Flaming/glowing time ¹⁾ discolouring time ¹⁾	min : s	no	no		
6		min : s	no	no		
7	<u>burning droplets</u> begin ¹⁾ extent occasional dropping of material constant dropping of material	min : s	not	not		
8			occured	occured		
9						
10	<u>separating from burning sample parts</u> begin ¹⁾ occasional separating parts constant separating parts	min : s	not	not		
11			occured	occured		
12						
13	duration of burning on the sieve tray (max.)	min : s	not	not		
	influence on the burner flame by dropping of / separating material time ¹⁾		no	no		
14		min : s				
15	<u>earlier end of test</u> end of the fire scenario on the sample ¹⁾ time of a possible resulted test stop ¹⁾	min : s	no	no		
16		min : s				

¹⁾ time from start of test

Test results of the Brandschacht tests part 2							
line no.		Measurements test sample					
			A	B	C	D	
17	<u>flaming after end of test</u> duration	min : s	not occured	not occured			
18	number of sample		--/--	--/--			
19	front side of sample	cm	--/--	--/--			
20	backside of sample		--/--	--/--			
21	flame length		--/--	--/--			
22	<u>glowing after end of test</u> duration	min . s	not occured	not occured			
23	number of sample		--/--	--/--			
24	place of occurrence lower sample part		--/--	--/--			
25	upper sample part		--/--	--/--			
26	front side of sample		--/--	--/--			
27	backside of sample		--/--	--/--			
28	<u>smoke density</u> < 400 % x min			9	0		
29	> 440 % x min			--/--	--/--		
30	diagram in annex no.		-	-			
31	<u>residual length</u> single results	cm	72 / 69 70 / 72	73 / 69 66 / 73			
32	average of the single results	cm	70	70			
33	foto of the sample on page		5	5			
34	<u>smoke temperature</u> max. of the average results	°C	118	119			
35	time ¹⁾	min : s	8:34	7:35			
36	diagram in annex no.		1	2			

¹⁾ time from start of test

Remarks: Because of the residual length of > 45 cm in two tests, the quantity of tests could be reduced, according to DIN 4102-16.

2.1.2 Appearance of the specimen after the test:



Sample A



Sample B

2.2.1 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit
 Flame application on: lower sample edge
 Edge ignition

Length direction

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self extinguishing of the flame [s]	18	24	25	25	25
Max. flame height [mm]	110	110	100	100	130
Time [s]	15	15	15	12	15
End of afterflaming [s]	3	9	10	10	10
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	-	-	-
Smoke development (visuell impression)	moderate production				
Separating from burning material	yes	no	no	yes	yes
Time [s]	14	-	-	15	12

Remarks: none

Cross direction

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	2	1	2	2	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self extinguishing of the flame [s]	-	-	14	-	-
Max. flame height [mm]	80	80	80	100	100
Time [s]	15	15	13	15	13
End of afterflaming [s]	10	10	-	10	10
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	25	25	-	25	25
Smoke development (visuell impression)	moderate production				
Separating from burning material	yes	no	no	yes	yes
Time [s]	15	-	-	15	14

Remarks: none

Appearance of the sample after the small burner test:



Assessment

The material, described in chapter one fulfils the requirements of the building class B2 according to DIN 4102-1 (Mai 1998).

The determined test results show that the material also fulfils the requirements

of the building class B1 burning droplets

according to DIN 4102-1 (Mai 1998).

Special comment

The fire test result is only valid for the in chapter one described material in the tested colours, thicknesses and square weights.

The test was carried out in free hanging configuration.

The distance to other plane material must be more or equal then 40 mm.

The material wasn't tested after an outside storage.

In combination with other materials (for example coatings, deposits) the burning behaviour could be influenced unfavourable so that the classification above is not valid any longer. According to DIN 4102-1 the burning behaviour in combination with other materials has to be tested separately.

This test report did not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the “Verwendbarkeitsnachweis”.

Frankfurt, the 11.06.2014



A. Wegner / H. Anders
Tester in charge



Dipl.-Ing. T. Zachäus
Laboratory supervisor

This Test report is valid until 29.04.2019

The results of the tests relate only to the behaviour of the test specimen which is designated on the top.

Test reports are only allowed to be published or reproduced, not changed in form and tenor without permission of the Exova Warringtonfire, Frankfurt. The abridged account of a test report is only allowed with the agreement of the Exova Warringtonfire, Frankfurt.

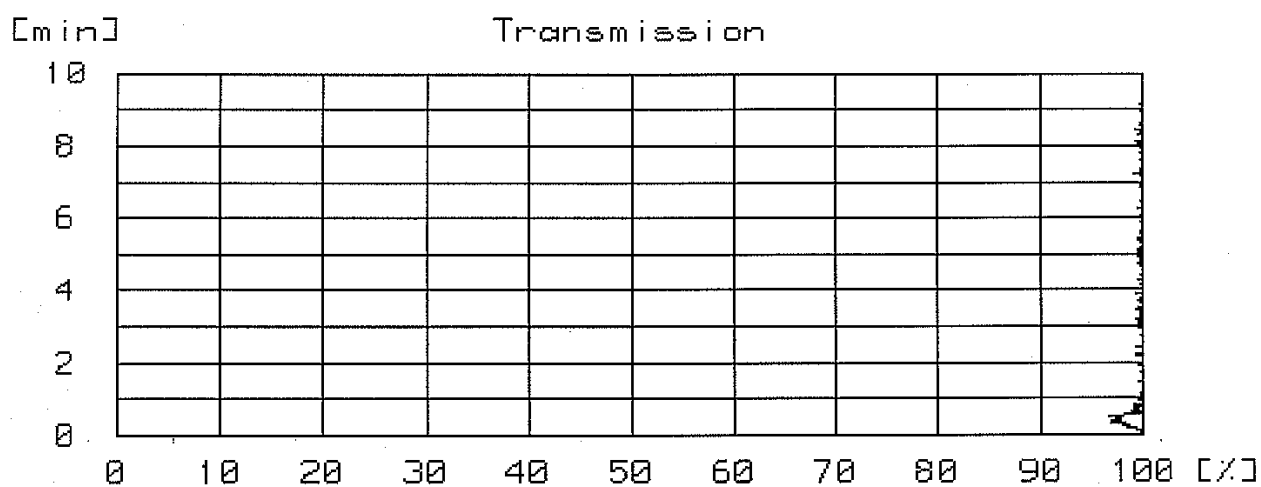
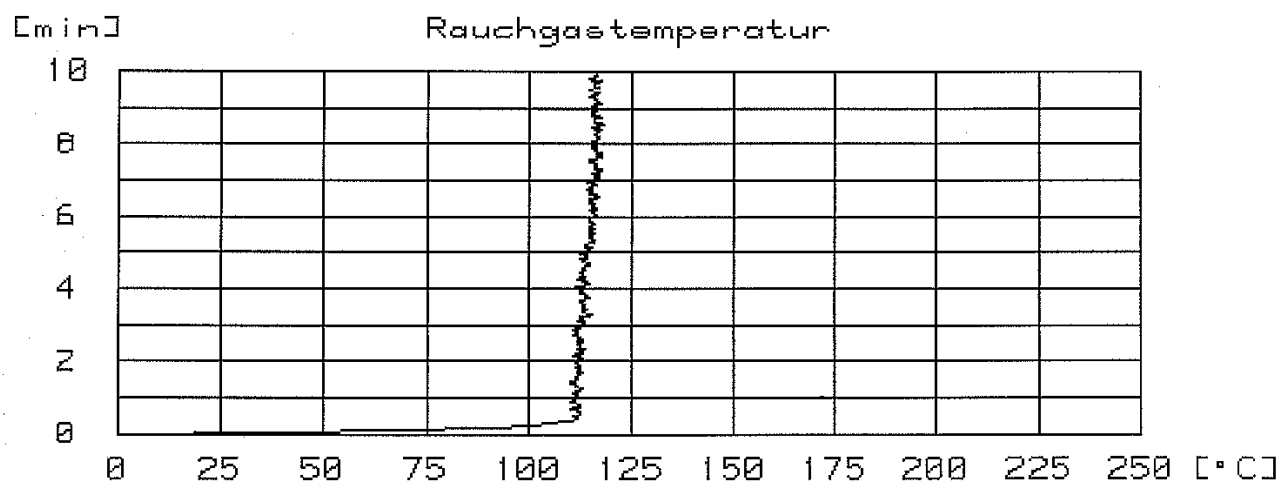
This test report is a translation of the German version 2014-1470 (issued 12.05.2014). In case of doubt only the German version is valid

This test report contains 8 pages and 2 annexes.

Testing. Advising. Assuring.

Annex 1 to the Test report No. 2014-1559 issued 11.06.2014

Sample A:



Testing. Advising. Assuring.

Annex 2 to the Test report No. 2014-1559 issued 11.06.2014

Sample B:

