

No. AJFS1811011393FF-01

Date: DEC.17, 2018

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SOYANG TECHNICAL TEXTILE (ZHEJIANG) CO., LTD

NO.36 JINNIU ROAD, JIANSHAN DISTRICT, HAINING CITY, ZHEJIANG PR., CHINA

THE TEST REPORT IS TO SUPERSEDE THE TEST REPORT No.: AJFS1811011393FF, DATE: DEC.05, 2018.

The following sample(s) was / were submitted and identified on behalf of the client as:

Sample Description: ULTRA WHITE BLOCKOUT FABRIC

Color: WHITE

Style/Item No.: ST-208

Test Requested:

To determine the flammability (building materials class B1) in accordance with DIN 4102-1 (May 1998) Fire behaviour of building materials and elements Part 1: Classification of building materials, Requirements and testing.

Test Results: -- See attached sheet -

<u>Classification</u>: The tested sample **meets** class **B1** building materials requirements of DIN 4102-1 (May

1998).

Test Period:

Sample Receiving Date : NOV.19, 2018

Test Performing Date : NOV.19, 2018 TO DEC.04, 2018

Signed for and on behalf of SGS-CSTC Co., Ltd. Anji Branch



Technical Manager





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I. Test conducted

This test was conducted as per DIN 4102-15:1990 DIN 4102-16:1998 and DIN 4102-1:1998 Clause 6.2, and Classification in according to DIN 4102-1 (May 1998) Clause 6.1-Class B1 materials.

II. Sample details

Sample description	Ultra White Blockout Fabric
Color	White
Density	About 293 g/m ²
Size of sample	1000mm×190mm & 190mm×90mm

Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of 23 \pm 2 $^{\circ}$ C, and a relative humidity of 50 \pm 6 $^{\circ}$ C.

III. Test results

1) "Brandschacht" Test according to DIN 4102-15 &16

Exposed surface: The front face

Results of "Brandschacht" Test (part 1)								
Line		Unit	Test assemblies No.					
No.		Offic	Lengthwise	Widthwise				
1	Specimen fixings according to DIN 4102 part 15, table	/	1	1				
2	Max. flame height above lower sample edge;	cm	40	40				
3	Time 1)	min:s	00:09	00:10				
	Melting/burning through		/	/				
4	Time 1)	min:s	00:02	00:01				
	Back of specimen		/	/				
5	Flaming/glowing, Time 1)	min:s	00:03	00:02				
6	Discolouring, Time 1)	min:s	00:01	00:01				
	Burning droplets		/	/				
7	Begin 1)	min:s	00:05	00:07				
	<u>Amount</u>		/	/				
8	Specimen material falling off in separate droplets		/	/				
9	Specimen material falling off continuously		\checkmark	\checkmark				

To be continued...



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	Results of "Brandscha	acht" Tes	t (part 2)			
Line		Unit	Test assemblies No.			
No.		Offic	Lengthwise	Widthwise		
	Burning parts		No	No		
10	Begin 1)	min:s	/	/		
11	Parts of sample falling off separately		/	/		
12	Parts of sample falling off continuously		/	/		
13	Duration of continued combustion on mesh base (max.)	min:s	No	No		
	Burner flame impairment by dripping/falling material		No	No		
14	Time 1)	min:s	/	/		
	Premature ending of test		/	/		
15	End of burning at specimen 1)	min:s	/	/		
16	Time when test terminated (if applicable) 1)	min:s	/	/		
	Burning after end of test		No	No		
17	Duration	min:s	/	/		
18	Number of specimens		/	/		
19	Front of specimen		/	/		
20	Back of specimen		/	/		
21	Height of flame	cm	/	/		
	Glowing after end of test		No	No		
22	Duration	min:s	/	/		
23	Number of specimens		/	/		
24	Front of specimen		/	/		
25	Back of specimen		/	/		
26	Top half of specimen		/	/		
27	Bottom half of specimen		/	/		

To be continued...



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Results of "Brandschacht" Test (part 3)								
Line		Unit						
No.		Offic	Lengthwise		Widthwise			
	Residual length		/		/			
28	Single results	cm	66	72	64	66		
20	orngic results		67	69	68	69		
29	Average of the single results	cm	68.5		66.8			
	Smoke temperature		/		/			
30	Max. of average	$^{\circ}$	154.3		151.8			
31	Time 1)	min:s	06:48		06:41			

Note: 1) time from start of testing

Class B1 materials:

If the residual length measured after the first test is 45cm or greater, further tests are not required.

2) Normal Flammability Test according to DIN 4102-1 Clause 6.2

Edge ignition

Fire application time: 15s

Parameter	Lengthwise				Crosswise					
Falallietei		2	3	4	5	6	7	8	9	10
Whether or not flaming extinguished before reach the gauge mark(Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Whether or not flaming reach the measuring mark within 20 seconds (Yes/No)	No	No	No	No	No	No	No	No	No	No
Time for the flame tip to reach the gauge mark(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Afterflame time (s)	0	0	0	0	0	0	0	0	0	0
Max. flame height (cm)	10	9	8	10	9	10	11	10	9	9
Molten dripping(Yes/No)	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
Smoke developments (visual impression)	Slight			Slight						

Note:

NA---Not applicable

To be continued...



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^{*}Reduction in number of test (DIN 4102 Part 16, clause 5.2)



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IV. DIN 4102-1:1998 Criteria for classification

- All materials, except flooring, may be classed as B1 materials if they meet the following requirements a) and
 b):
- a) The test using the 'Brandschacht' apparatus described in DIN 4102-15 (cf. subclause 6.1.3.1) shall be deemed passed if
- The mean value for the residual length (portion of specimen that has not burned or charred; cf. subclause
- 9.1 of DIN 4102-16) of each specimen is at least 15 cm and no individual values are lower than 0 cm,
- The mean effluent temperature does not exceed 200 °C in any test,
- The requirement for the residual length of each specimen is met even where there is afterflame, afterglow, or smouldering.
- b) Pass DIN 4102-1: 1998 sub-clause 6.2.3 Ignitability Test if
 For each specimen, flaming doesn't reach the gage mark within 20s after flame application.
- 2) Materials may be classed as **B2** materials if they pass the ignitibility test specified in DIN 4102-1: 1998 subclause 6.2.5.

For each specimen, flaming doesn't reach the gage mark (150mm marks) within 20s after flame application.

3) Combustible materials which cannot be classed as B1 or B2 materials shall be classed as B3 materials.

STATEMENTS:

This test report does not replace any mandatory certification of the product that may be required.

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire and smoke hazard of the product in use.

To be continued...



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Photo Appendix:



SGS authenticate the photo on original report only

*** End of Report ***

