



TEST REPORT

No. : SP120804736

Date : Aug. 31,2012

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

Sample Name : PVC COATED FRONTLIT-SEMI COATED
Sample No. : SP120804736
Manufacturer :
Buyer :
Test Required : 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
Date of Receipt : Aug. 13,2012
Test Period : Aug. 13,2012 to Aug. 31,2012
Test result(s) : For further details, please refer to the following page(s)

***** To be continued*****

Signed for SGS-CSTC Standards
Technical Services (Shanghai) Co., Ltd

Ivy Zhu

Ivy Zhu
Authorized signatory

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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.
Classification in according to DIN 4102-1 (May 1998) Clause 6.1-Class B1 materials

II. Sample details

General description	PVC COATED FRONTLIT-SEMI COATED
Color / Density	White / About 489g/m ²
Size of sample	1000 mm×190 mm & 190 mm×90 mm

Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of 23 ± 2 °C,
and a relative humidity of 50 ± 6 %.

III. Test results

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

Exposed surface: The Front face

Results of "Brandschacht" Test (part 1)				
Line No.		Unit	Test assemblies No.	
			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	0:12	0:13
4	<u>Melting/burning through</u> Time ¹⁾	min:s	0:06	0:07
5	<u>Back of specimen</u> Flaming/glowing, Time ¹⁾	min:s	0:06	0:07
6	Discolouring, Time ¹⁾	min:s	0:05	0:05
7	<u>Burning droplets</u> Begin 1)	min:s	No	No
	<u>Amount</u>		/	/
8	Specimen material falling off in separate droplets		/	/
9	Specimen material falling off continuously		/	/

***** To be continued*****

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Results of "Brandschacht" Test (part 2)			
Line No.	Unit	Test assemblies No.	
		Lengthwise	Widthwise
	<u>Burning parts</u>	No	No
10	Begin 1)	/	/
11	Parts of sample falling off separately	/	/
12	Parts of sample falling off continuously	/	/
13	Duration of continued combustion on mesh base (max.)	No	No
	<u>Burner flame impairment by dripping/falling material</u>	No	No
14	Time ¹⁾	/	/
	<u>Premature ending of test</u>	/	/
15	End of burning at specimen ¹⁾	/	/
16	Time when test terminated (if applicable) ¹⁾	/	/
	<u>Burning after end of test</u>	No	No
17	Duration	/	/
18	Number of specimens	/	/
19	Front of specimen	/	/
20	Back of specimen	/	/
21	Height of flame	cm	/
	<u>Glowing after end of test</u>	No	No
22	Duration	/	/
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 No.	Unit	Test assemblies No.			
		Lengthwise		Widthwise	
28	<u>Residual length</u>				
	Single results	76	75	76	76
		74	75	77	75
29	Average of the single results	75		76	
30	<u>Smoke temperature</u>				
	Max. of average	109		110	
31	Time ¹⁾	10:00		10:00	

Note: ¹⁾ time from start of testing

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

Flame application: [] bottom edge ignition, [] surface ignition

[] Lengthwise

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	15	15	15	15	15
Max. flame height (cm)	4	5	4	4	4
End of afterflaming (s)	15	15	15	15	15
End of afterglowing (s)	15	15	15	15	15
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

[] Widthwise

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	15	15	15	15	15
Max. flame height (cm)	5	5	4	4	5
End of afterflaming (s)	15	15	15	15	15
End of afterglowing (s)	15	15	15	15	15
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

All timings are from start of testing

***** To be continued*****

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Criteria for classification for Class B1 (DIN 4102-1 Clause 6.1.2)

All materials, except flooring, may be classed as B1 materials if they met,

- a) Pass DIN 4102-16 "brandschacht" test if
 - 1) The mean value for the residual length of each specimen is at least 15 cm, and no individual values are lower than 0 cm;
 - 2) The mean effluent temperature does not exceed 200°C in any test;
 - 3) The requirement for the residual length of each specimen is met even where there is afterflame, afterglow, or smouldering.
- b) Pass DIN 4102-1 Clause 6.2.3 Ignitability Test if,
For each specimen, flaming doesn't reach the gage mark within 20s after flame application.

Conclusion:

The tested sample **meets** the low flammability requirements of class B1 of building materials under DIN 4102-1 (May 1998).

There is no fall-off of burning material.

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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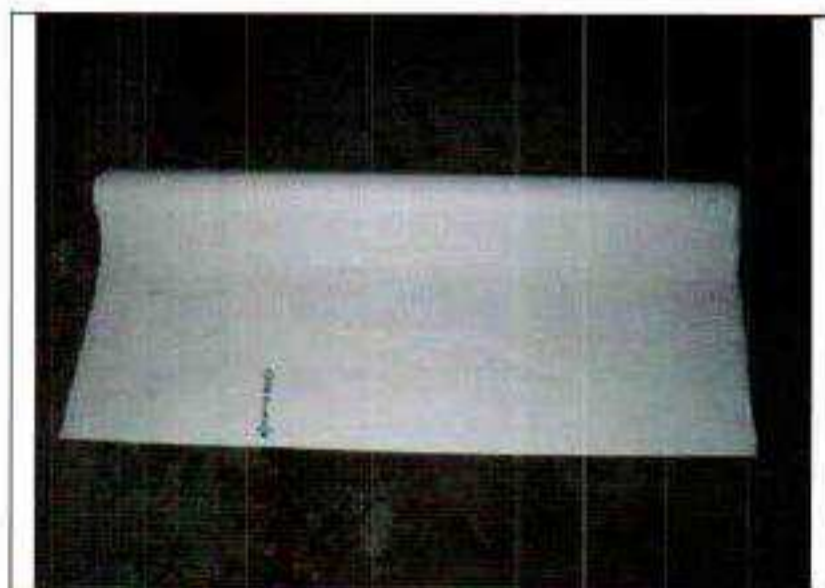
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Sample Photo:



- The test was performed by SGS internal laboratory.

***** End of report *****

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