









No. AJFS2108006829FF

Date: AUG.27, 2021

Page 1 of 6

## SOYANG TECHNICAL TEXTILE (ZHEJIANG) CO., LTD

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

**Sample Name: STARLIGHT E COATED BACKLIT FABRIC (POLYESTER + POLYACRYLATE)** 

SGS Ref No.: CZHL2108004953OT

Style No.: ST-600

The above sample(s) was / were submitted and identified on behalf of the client. SGS is not responsible for the authenticity, integrity and results of the data and information and / or the validity of the conclusion arising therefrom. Results apply to the sample as received.

\*\*\*\*\*\*

### **Test Requested:**

DIN 4102-1: 1998-05 Fire behaviour of building materials and elements Part 1: Classification of building materials, Requirements and testing, Class B1 materials---For all materials except flooring.

Test Results: -- See attached sheet -

Classification: The tested sample meets class B1 materials requirements of DIN 4102-1: 1998-05.

### **Test Period:**

Sample Receiving Date : AUG.10, 2021

Test Performing Date : AUG.10, 2021 TO AUG.25, 2021

Signed for and on behalf of

SGS-CSTC Standards Technical Services Co., Ltd. Anji Branch



Approved Signatory





No. AJFS2108006829FF

Date: AUG.27, 2021

Page 2 of 6

#### I. Test conducted

This test was conducted as per DIN 4102-15:1990 Fire behaviour of building materials and elements – 'Brandschacht' apparatus, DIN 4102-16:2015 Fire behaviour of building materials and elements – 'Brandschacht' tests and DIN 4102-1: 1998-05 Clause 6.2, and Classification according to DIN 4102-1: 1998-05 Clause 6.1 Class B1 materials.

### II. Sample details

General description	Fabric
Color	White
Area Density	164 g/m²
Size of sample	190mm×1000mm & 190mm×90mm

## Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of  $23 \pm 2$  °C, and a relative humidity of  $50 \pm 5$  %.

#### 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 direction				
No.			Lengthwise	Widthwise			
1	Specimen fixings according to DIN 4102 part 15, table	/	/	/			
2	Max. flame height above lower sample edge;	cm	60	60			
3	Time 1)		01:10	00:58			
	Melting/burning through		Yes	Yes			
4	Time 1)	min:s	00:04	00:05			
	Back of specimen		Yes	Yes			
5	Flaming/glowing, Time 1)	min:s	00:04	00:05			
6	Discolouring, Time 1)	min:s	00:04	00:05			
	Burning droplets		Yes	Yes			
7	Begin 1)	min:s	00:07	00:12			
	<u>Amount</u>		/	/			
8	Specimen material falling off in separate droplets		√	$\checkmark$			
9	Specimen material falling off continuously		/	/			

To be continued...



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Document as http://www.sgs.com/en/Terms-en/Conditions/Terms-en/Comments.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent or the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

No. 301, Sunlight Road, 2 Block, Sunlight Industry Zone, Anji County, Zhejiang Province, China 313300 t (86-572) 5018825 f (86-572) 5018829 www.sgsgroup.com.cn 中国·浙江·安吉县阳光工业园二区阳光大道301号 邮编:313300 t (86-572) 5018825 f (86-572) 5018829 e sgs.china@sgs.com



No. AJFS2108006829FF

Date: AUG.27, 2021

Page 3 of 6

	Results of "Brandscha	acht" Lest			
Line		Unit	Test direction		
No.		O m	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...



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

\*\*Attention:To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or remail: CN.Docche@bass.com

No. 301, Sunlight Road, 2 Block, Sunlight Industry Zone, Anji County, Zhejiang Province, China 313300 t (86-572) 5018825 f (86-572) 5018829 www.sgsgroup.com.cn 中国·浙江·安吉县阳光工业园二区阳光大道301号 邮编:313300 t (86-572) 5018825 f (86-572) 5018829 e sgs.china@sgs.com



No. AJFS2108006829FF

Date: AUG.27, 2021

Page 4 of 6

Results of "Brandschacht" Test (part 3)									
Line		Unit	Test direction						
No.		Unit		Lengthwise		nwise			
	Residual length		/		/				
28	Single results	cm	52	54	49	52			
20	Single results		57	53	54	52			
29	Average of the single results	cm	54		52				
	Smoke temperature		/		/				
30	Max. of average	$^{\circ}$	148.3		150.2				
31	Time 1)	min:s	04:21		05:03				

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				
Falametei		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)	7	7	8	6	7	6	7	7	8	6
Molten dripping (Yes/No)	No	No	No	No	No	No	No	No	No	No
Smoke developments (visual impression)	Slight			Slight						

Note: NA---Not applicable

To be continued...



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printer workers, and allowed on the conditions of the company subject to the conditions of the company and the company

No. 301, Sunlight Road, 2 Block, Sunlight Industry Zone, Anji County, Zhejiang Province, China 313300 t (86-572) 5018825 f (86-572) 5018829 www.sgsgroup.com.cn

中国・浙江・安吉县阳光工业园二区阳光大道301号

邮编:313300 t (86-572) 5018825 f (86-572) 5018829 e sgs.china@sgs.com

<sup>\*</sup>Reduction in number of test (DIN 4102 Part 16, clause 5.2)



No. AJFS2108006829FF

Date: AUG.27, 2021

Page 5 of 6

#### IV. DIN 4102-1:1998 Criteria for classification

- 1) 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.

 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 declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

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...



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printe werleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions,">http://www.sgs.com/en/Terms-and-Conditions,</a> for electronic format documents unject to the format documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx</a> steed therein. Any holder of this document divised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to ransaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduce except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content company is the standard of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the suits shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



No. AJFS2108006829FF

Date: AUG.27, 2021

Page 6 of 6

**Photo Appendix:** 



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Condit

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 830: 1443, or email: CN.Doccheck@sgs.com