







Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 1 of 7

SUZHOU FOREST AUTOMOBILE NEW MATERIAL CO., LTD

NO.8, GUANGYUAN ROAD, ZHITANG INDUSTRIAL PARK, CHANGSHU CITY, JIANGSU PROVINCE

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Sample Description: POLYESTER FIBER ACOUSTIC PANEL

SGS Ref No.: NJIN2305000584PL01

Style / Item No.: /

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.

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# **Test Requested:**

EN 13501-1:2018 Fire classification of construction products and building elements—Part 1: Classification using data from reaction to fire tests.

Test Results: -- See attached sheet -

**Test Period**:

Sample Receiving Date : MAY 09, 2023

Test Performing Date : MAY 09, 2023 TO MAY 22, 2023

Signed for and on behalf of

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



Approved Signatory





Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 2 of 7

# I. Test conducted

This test is conducted as per EN 13501-1:2018 Fire classification of construction products and building elements-Part 1: Classification using data from reaction to fire tests. And the test methods as following:

- 1. EN 13823:2020+A1:2022 Reaction to fire tests for building products Building products excluding floorings exposed to the thermal attack by a single burning item.
- 2. EN ISO 11925-2:2020 Reaction to fire tests Ignitability of products subjected to direct impingement of flame Part 2: Single-flame source test.

# II. Details of classified product

#### a) Nature and end use application

The product "Polyester Fiber Acoustic Panel (provided by client)" is defined as a decorative sheet. Its classification is valid for the following end use application: Indoor wall, used for sound absorption and decoration.

#### b) Description

Description	Polyester Fiber Acoustic Panel (provided by client)
Color	Black
Sample size	EN 13823: 1500mm×1000mm & 1500mm×495mm EN ISO 11925-2: 250mm×90mm
Thickness	9mm
Mass per unit area	1400 g/m <sup>2</sup>
Exposed surface	Any surface

# Mounting and fixing:

Gypsum plasterboard, with its density approximate  $700\pm100$  kg/m³, thickness approximate  $12.5\pm0.5$ mm, is as the Backing board. The test specimen was fixed mechanically to the substrate. No joint in the specimen.



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Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 3 of 7

#### III. Test results

Test method	Parameter	Number of tests	Results
	FIGRA <sub>0.2MJ</sub> (W/s)		38.6
	FIGRA <sub>0.4MJ</sub> (W/s)		38.6
EN 13823	Whether lateral flame spread (LFS) to the edge of specimen (Yes/No)		No
	THR <sub>600s</sub> (MJ)	3	3.1
	SMOGRA (m²/s²)		10.9
	TSP <sub>600s</sub> (m <sup>2</sup> )		33.0
	Flaming particles or droplets (Yes/No)		No
EN ISO 11925-2 Exposure = 30 s	Whether vertical flame spread (Fs) in excess of 150 mm within 60s (Yes/No)	12	No
	Ignition of the filter paper (Yes/No)		No

### IV. Classification and field of application

#### a) Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

# b) Classification

The product, Polyester Fiber Acoustic Panel (provided by client), in relation to its reaction to fire behaviour is classified:

Fire behaviour		Smoke production			Flaming	droplets
В	_	S	1	,	d	0

Reaction to fire classification: B-s1, d0

Remark: The classes with their corresponding fire performance are given in annex A.

# c) Field of application

This classification is valid for the following end use applications:

- --- With all substrates classified as A1 or A2
- --- With mechanically fixing
- --- No joint



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Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 4 of 7

This classification is valid for the following product parameters:

--- Characteristics as described in section II b) of this test reports.

#### Statement:

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.

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 hazard of the product in use.

#### Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.



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Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 5 of 7

#### Annex A

# Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products

Class	Test method(s	)	Classification criteria	Additional classification	
	EN ISO 1182 ª	and	△T≤30°C, and △m≤50%, and t∈0(i.e. no sustained flaming)	-	
A1	EN ISO 1716		PCS≤2.0MJ/kg <sup>a</sup> and PCS≤2.0MJ/kg <sup>b c</sup> and PCS≤1.4MJ/m <sup>2</sup> <sup>d</sup> and PCS≤2.0MJ/kg <sup>e</sup>	-	
	EN ISO 1182 a or		<i>∆T</i> ≤50°C, and <i>∆m</i> ≤50%, and t <sub>f</sub> ≤20 s	-	
A2	EN ISO 1716	and	PCS≤3.0MJ/kg a       and         PCS≤4.0MJ/m² b       and         PCS≤4.0MJ/m² d       and         PCS≤3.0MJ/kg e	-	
	EN 13823		FIGRA≤120W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤7.5MJ</edge>	Smoke production <sup>f</sup> and Flaming droplets/particles <sup>g</sup>	
В	EN 13823	and	FIGRA≤120W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤7.5MJ</edge>	Smoke production <sup>f</sup> and Flaming droplets/particles <sup>g</sup>	
	EN ISO 11925-2 i Exposure =30s		within 60s <i>F</i> s≤150mm		
С	EN 13823	and	FIGRA≤250W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤15MJ</edge>	Smoke production <sup>f</sup> and Flaming droplets/particles <sup>g</sup>	
	EN ISO 11925-2 i Exposure=30s		<i>F</i> s≤150mm within 60 s		
	EN 13823	and	FIGRA≤750W/s	Smoke production <sup>f</sup> and	
D	EN ISO 11925-2 i Exposure=30s		<i>F</i> s≤150mm within 60 s	Flaming droplets/particles <sup>g</sup>	
E	EN ISO 11925-2 i Exposure =15s		<i>F</i> s≤150mm within 20 s	flaming droplets/particles h	



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Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 6 of 7

I <b>-</b>	EN ISO 11925-2 <sup>i</sup>	Fa > 150mara with in 20 a
	Exposure = 15 s	Fs>150mm within 20 s

- <sup>a</sup> For homogeneous products and substantial components of non-homogeneous products.
- <sup>b</sup> For any external non-substantial component of non-homogeneous products.
- ° Alternatively, any external non-substantial component having a PCS ≤ 2,0 MJ/m², provided that the product satisfies the following criteria of EN 13823: FIGRA ≤ 20 W/s, and LFS < edge of specimen, and THR<sub>600s</sub> ≤ 4,0 MJ, and s1, and d0.
- <sup>d</sup> For any internal non-substantial component of non-homogeneous products.
- <sup>e</sup> For the product as a whole.
- $^{\rm f}$  s1 = SMOGRA ≤  $30 \text{m}^2/\text{s}^2$  and TSP<sub>600s</sub> ≤  $50 \text{m}^2$ ; s2 = SMOGRA ≤  $180 \text{m}^2/\text{s}^2$  and TSP<sub>600s</sub> ≤  $200 \text{m}^2$ ; s3 = not s1 or s2
- g d0 = No flaming droplets/ particles in EN 13823 within 600 s;
- d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;
- d2 = not d0 or d1.
- Ignition of the paper in EN ISO 11925-2 results in a d2 classification.
- <sup>h</sup> Pass = no ignition of the paper (no classification);
- Fail = ignition of the paper (d2 classification).
- Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.



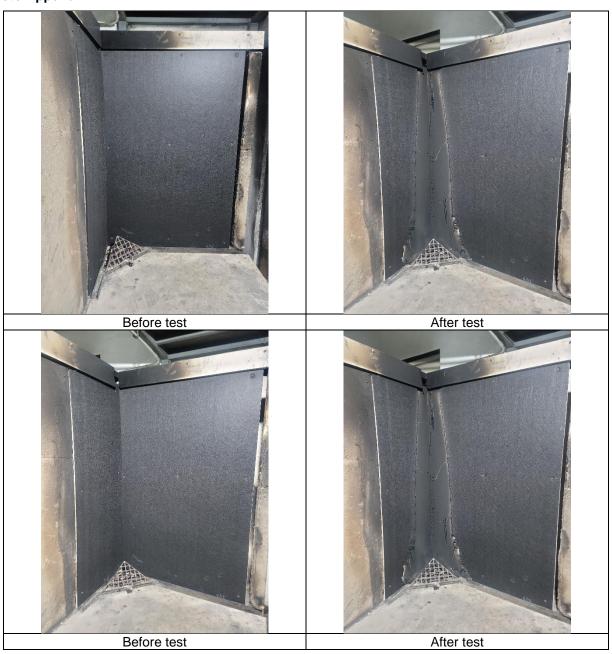
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# Test Report No.: AJFS2305003713FF-01 Date: MAY 24, 2023 Page 7 of 7

# **Photo Appendix:**



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



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