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TESTING  
CNAS L7877

## Test Report

No. SDFS2104002398FF

Date: Apr.30, 2021 Page 1 of 5

GUANGDONG OPALY NEW MATERIALS TECHNOLOGY CO.,LTD  
ROOM 1218, NO.2 BUILDING, AREA 9, AOYUAN CHENGSHI TIANDI, HANXI AVENUE EAST, PANYU DISTRICT, GUANGZHOU, GUANGDONG, 511495 CHINA

Sample Description : MODIFIED ACRYLIC  
Manufacturer : YUNFU OPALY NEW MATERIALS TECHNOLOGY CO.,LTD

The above data and information 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.

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SGS Ref No. : GZIN2104019925CM  
Sample Receiving Date : Apr.20, 2021  
Test Performing Date : Apr.20, 2021 to Apr.30, 2021

### Test Result Summary

Test(s) Requested	Result(s)
GB 8624-2012 Fire classification for burning behavior of building materials and products Clause 5.1.1 Table 2 Classes of reaction to fire performance for slab building materials and construction products	Classification: B <sub>1</sub> (B-s1,d0)
<b>Summary:</b>	
1. For further details, please refer to the following page(s).	

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

scan to see the report



SDFS2104002398FF

Ivette Zhang  
Approved signatory



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TESTS AND RESULTS

**Test Conducted:**

GB 8624-2012 Fire classification for burning behavior of building materials and products. Clause 5.1.1 Table 2 Classes of reaction to fire performance for slab building materials and construction products. And the test methods as following:

1. GB/T 20284-2006 Single burning item test for building materials and products.
2. GB/T 8626-2007 Test method of flammability for building materials.

**Mounting and fixing (For GB/T 20284):**

There is 5mm ventilation cavity behind the specimen. The specimen was tested free standing. Both wings were clamped at the top and the bottom. There is no joint between the specimens.

**Test Results:**

Test method	Parameter	Number of tests	Results
GB/T 20284-2006	FIGRA <sub>0.2MJ</sub> (W/s)	3	21.5
	FIGRA <sub>0.4MJ</sub> (W/s)		21.5
	LFS < edge of specimen		Yes
	THR <sub>600s</sub> (MJ)		1.5
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )		5.1
	TSP <sub>600s</sub> (m <sup>2</sup> )		32.4
	Flaming particles or droplets within 600s (Yes/No); Combustion time, if any burning time: (≤10s / >10s)		No
GB/T 8626-2007 Exposure = 30 s	Fs ≤ 150 mm within 60s	12	Yes
	Ignition of the filter paper within 60s		No

Remark:

FIGRA-Fire growth rate index used for classification purposes [W/s]

For Class A2 and Class B FIGRA= FIGRA<sub>0.2MJ</sub>

For Class C and Class D FIGRA= FIGRA<sub>0.4MJ</sub>

LFS - Lateral flame spread [m]

THR<sub>600s</sub> -Total heat release within 600 s [MJ]

SMOGRA-Smoke growth rate [m<sup>2</sup>/s<sup>2</sup>]

TSP<sub>600s</sub> -Total smoke production within 600 s [m<sup>2</sup>]

**Classification and direct field of application:**

This classification has been carried out in accordance with GB 8624-2012 Clause 5.1.1 Table 2 Classes of reaction to fire performance for slab building materials and construction products

**Conclusion:**

According to the test result, Combustion properties identified as: GB 8624 B<sub>1</sub> (B-s1,d0) ;

The submitted sample satisfies Class B<sub>1</sub> requirement of reaction to fire performance for slab building materials and construction products in GB 8624-2012.



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Table 2 Classes of reaction to fire performance for slab building materials and construction products

Class		Test method(s)		Classification criteria
A	A1	GB/T 5464 <sup>a</sup>	and	$\Delta T \leq 30^{\circ}\text{C}$ ; $\Delta m \leq 50\%$ ; $t_f = 0$
				GB/T 14402
	A2	GB/T 5464 <sup>a</sup> or	and	$\Delta T \leq 50^{\circ}\text{C}$ ; $\Delta m \leq 50\%$ ; $t_f \leq 20 \text{ s}$
				GB/T 14402
		GB/T 20284		$\text{FIGRA}_{0.2 \text{ MJ}} \leq 120 \text{ W/s}$ ; $\text{LFS} < \text{edge of specimen}$ ; $\text{THR}_{600\text{s}} \leq 7.5 \text{ MJ}$
B <sub>1</sub>	B	GB/T 20284 and		$\text{FIGRA}_{0.2 \text{ MJ}} \leq 120 \text{ W/s}$ ; $\text{LFS} < \text{edge of specimen}$ ; $\text{THR}_{600\text{s}} \leq 7.5 \text{ MJ}$
		GB/T 8626 Exposure =30s		$\text{Fs} \leq 150 \text{ mm}$ within 60s; No ignition of paper within 60s
	C	GB/T 20284 and	$\text{FIGRA}_{0.4 \text{ MJ}} \leq 250 \text{ W/s}$ ; $\text{LFS} < \text{edge of specimen}$ ; $\text{THR}_{600\text{s}} \leq 15 \text{ MJ}$	
		GB/T 8626 Exposure =30s		$\text{Fs} \leq 150 \text{ mm}$ within 60 s; No ignition of paper within 60s
B <sub>2</sub>	D	GB/T 20284 and		$\text{FIGRA}_{0.4 \text{ MJ}} \leq 750 \text{ W/s}$
		GB/T 8626 Exposure =30s		$\text{Fs} \leq 150 \text{ mm}$ within 60 s; No ignition of paper within 60s
	E	GB/T 8626 Exposure =15s		$\text{Fs} \leq 150 \text{ mm}$ within 20 s; No ignition of paper within 20s
B <sub>3</sub>	F	No performance determined		

<sup>a</sup> For homogeneous products or substantial components of non-homogeneous products.

<sup>b</sup> For any external non-substantial component of non-homogeneous products.

<sup>c</sup> any external non-substantial component having a  $\text{PCS} \leq 2.0 \text{ MJ/m}^2$ , provided that the product satisfies the following criteria of  $\text{FIGRA}_{0.2 \text{ MJ}} \leq 20 \text{ W/s}$ , and  $\text{LFS} < \text{edge of specimen}$ , and  $\text{THR}_{600\text{s}} \leq 4.0 \text{ MJ}$ , and s1, and d0 can be defined A1.

<sup>d</sup> For any internal non-substantial component of non-homogeneous products.

<sup>e</sup> For the product as a whole.



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Table B.1 smoke production levels and grading criterion		
SMOGRA	Test Method	Requirement
s1	GB/T 20284	SMOGRA $\leq 30\text{m}^2/\text{s}^2$ ; TSP <sub>600s</sub> $\leq 50\text{m}^2$
s2		SMOGRA $\leq 180\text{m}^2/\text{s}^2$ ; TSP <sub>600s</sub> $\leq 200\text{m}^2$
s3		not s1 or s2

Table B.2 Burning droplets / particles grades and grading criterion		
Burning droplets / particles grades	Test Method	Requirement
d0	GB/T 20284	No flaming droplets/ particles within 600 s
d1		Flaming droplets/ particles persisting longer than 10 s within 600 s
d2		not d0 or d1

**Statement:**

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.



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**SAMPLE INFORMATION AND PICTURES**

Thickness: 20mm  
 Density: 38.7kg/m<sup>2</sup>  
 ★Product usage: Metope / table top

The above data and information with ★ 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. results apply to the sample as received.



Before Test for GB/T 20284



After Test for GB/T 20284

**Remark:** The report is English version of Chinese test report SDFS2104002398FF\_CN. The Chinese version shall prevail in case of discrepancy between the Chinese version and English version.

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



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