

TEST REPORT

No. : XMIN2004002408CM

Date : Apr 29, 2020

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scan to see the report



XMIN2004002408CM

CUSTOMER NAME: FOSHAN OPALY COMPOSITE MATERIALS CO., LTD.
ADDRESS: NO.12-3, A AREA, JINGKOU PARK, CENTRAL SCIENCE AND TECHNOLOGY INDUSTRIAL ZONE, SANSHUI DISTRICT, FOSHAN, GUANGDONG P.R. CHINA

Sample Name : SOLID SURFACE SHEET
Place of origin : CHINA
Manufacturer : OPALY

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Date of Receipt : Apr 13, 2020
Testing Start Date : Apr 13, 2020
Testing End Date : Apr 29, 2020
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co. , Ltd Xiamen Branch
Testing Center

Civi Huang
Authorized signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center Commercial Construction Material Laboratory

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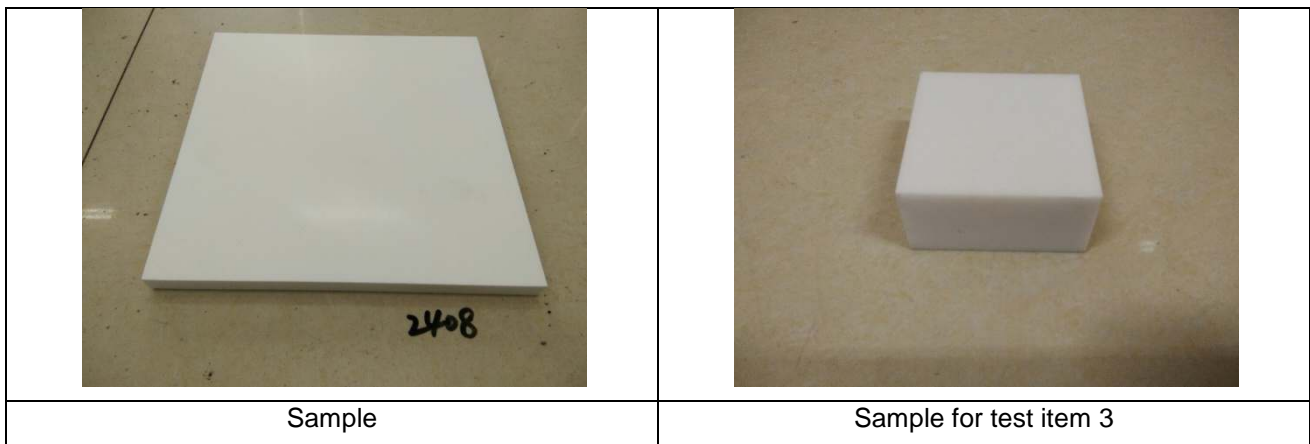
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Summary of Results:

No.	Test Item	Test Method	Result
1	Abrasion Resistance	Refer to ASTM C241/C241M-15ε1	Abrasion resistance: 51
2	Flexural Strength	Refer to ASTM C880/C880M-18	Dry Condition:47.4MPa Wet Condition: 46.5MPa
3	Compressive Strength	Refer to ASTM C170/C170M-17	Dry Condition: 144MPa Wet Condition: 135MPa
4	Absorption and Bulk Specific Gravity	Refer to ASTM C97/C97M-18	Water absorption : 0.12% Bulk specific gravity: 1789kg/m ³
5	Modulus of Rupture	Refer to ASTM C99/C99M-18	Dry Condition:54.6MPa Wet Condition: 53.3MPa
6	Static Coefficient of Friction	Refer to ASTM C1028-07ε1	Dry Condition:0.79 Wet Condition: 0.68
7	Thermal expansion	Refer to ASTM C531-00(2012)	52.8×10 ⁻⁶ /°C

Original Sample Photo:



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1. Test Item: Abrasion Resistance

Sample Description: See photo

Test Method: Refer to ASTM C241/C241M-15^{e1}

Test Condition:

Specimen: 50mm×50mm×20mm, 3pcs

Condition: ① 60±2℃, 48h→cooling, 2h→Abrasion resistance test→② Distilled water, 22±2℃, 1h

Load: 2000g

Revolutions: 225

Test Result:

Specimens identification No.	1	2	3
Abrasion resistance	46	49	58
Mean abrasion resistance	51		

2. Test Item: Flexural Strength

Sample Description: See photo

Test Method: Refer to ASTM C880/C880M-18

Test Condition:

Specimen: 350mm×100mm×12mm

Dry Condition: Dry in an oven at 60±2℃ for 48h→cool them to room temperature in a desiccators

Wet Condition: Immerse in distilled water at 22±2℃ for 48h

Support Span: 120mm

Testing Speed: 4MPa/min

Test Result:

Specimen No.	1	2	3	4	5	Ave.
Flexural strength, (Dry Condition) MPa	48.4	46.2	46.7	47.7	48.2	47.4
Flexural strength, (Wet Condition) MPa	47.5	46.8	46.7	46.3	45.1	46.5



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3. Test Item: Compressive Strength

Sample Description: See photo

Test Method: Refer to ASTM C170/C170M-17

Test Condition:

Specimen: 50mm×50mm×25mm

Dry Condition: Dry in an oven at 60±2°C for 48h→cool them to room temperature in a desiccators

Wet Condition: Immerse in distilled water at 22±2°C for 48h

Testing speed: 0.5MPa/s

Test Result:

Specimen No.	1	2	3	4	5	Ave.
Compressive strength, Dry Condition (MPa)	154	153	134	127	152	144
Compressive strength, Wet Condition (MPa)	143	129	129	128	145	135

4. Test Item: Water Absorption and Bulk Specific Gravity

Sample Description: See photo

Test Method: Refer to ASTM C97/C97M-18

Test Condition:

Specimen: 50mm×50mm×12mm

Condition: Dry in an oven at 60±2°C for 48h→Cool down in a desiccators for 30min→Immerse in distilled water at 22±2°C for 48h

Test Result:

Water absorption : 0.12%

Bulk specific gravity: 1789kg/m³



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5. Test Item: Modulus of Rupture

Sample Description: See photo

Test Method: Refer to ASTM C99/C99M-18

Test Condition:

Specimen: 200mm×100mm×12mm

Dry Condition: Dry in an oven at 60±2°C for 48h→cool them to room temperature in a desiccators

Wet Condition: Immerse in distilled water at 22±2°C for 48h

Testing Speed: 5000N/min

Span: 180mm

Test Result:

Specimen No.	1	2	3	4	5	Ave.
Modulus of rupture, (Dry condition) MPa	55.2	56.4	54.1	52.3	55.2	54.6
Modulus of rupture, (Wet condition) MPa	52.9	54.9	52.2	53.9	52.5	53.3

6. Test Item: Static Coefficient of Friction

Sample Description: See photo

Test Method: Refer to ASTM C1028-07^{e1} Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method

Test Condition:

Specimen: 200mm×200mm×12mm, 3pcs

Contact area: 75×75 (mm²)

Load: 22.80kg

Test Result:

Test item(s)	Test result(s)
Static Coefficient of Friction for Dry Surface	0.79
Static Coefficient of Friction for Wet Surface	0.68



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7.Test Item: Linear thermal expansion coefficient

Sample Description: See photo

Test Method: Refer to ASTM C531-00(2012)

Test Condition:

Specimen: 250mm×25mm×12mm, 4pcs

High temperature: 100°C, 16h

Low temperature: 23°C, 16h

Test Result:

Specimen No.	1	2	3	4
Linear thermal expansion coefficient (10 ⁻⁶ /°C)	56.7	48.4	52.1	54.1
Mean value (10 ⁻⁶ /°C)	52.8			

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



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