

No.: GZIN1911062095CM

Date: Nov 28, 2019

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CUSTOMER NAME: SOLIDTOP CO., LTD.

ADDRESS: NO.16, XINGHAN ROAD, SANZAO TOWN, JINWAN AREA, ZHUHAI CITY,

**GUANGDONG PROVINCE, CHINA** 

Sample Name : SOLID SURFACE

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 : Nov 18, 2019
Testing Start Date : Nov 18, 2019
Testing End Date : Nov 28, 2019

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. GZ Branch Testing

Tobby Yang

Authorized signatory





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# Summary of Results:

No.	Test Item	Test Method	Result		Conclusion
1	Abrasion Resistance	EN 14617-4:2012	See test result		1
2	Impact Resistance	EN 14617-9:2005	6.52 J		1
3	Resistance to Dry Heat	EN 438-2:2016 Section 16	Rating 5		/
4	Water Absorption and Apparent Density	EN 14617-1:2013	Apparent de	ption: 0.03% ensity: 1890 /m³	/
5	Resistance to Stains	EN 14617-10:2012 Annex A	See tes	st result	1
6	Resistance to Immersion in Boiling Water	EN 438-2:2016 Section 12	See test result		/
7	Flexural Test	EN ISO 178:2019 Method A	Flexural Strength Flexural Modulus	53.2MPa 10200MPa	. /
8	Izod Unnotched	EN ISO	U -2002000	J/m <sup>2</sup>	/
	Impact Strength	180:2000/Amd.2:2013	C (Compl	ete break)	
9	Tensile Modulus	EN ISO 527-1:2012 & EN ISO 527-2:2012	9610MPa		/
		EN ISO 527-1:2012 & EN	Tensile Strength	37.0MPa	
10	10 Tensile Test ISO 527-1:2012 & EN ISO 527-2:2012		Tensile Strain at Break	0.47%	/

Note: Pass : Meet the requirements;

Fail: Does not meet the requirements;

/: Not Apply to the judgment.



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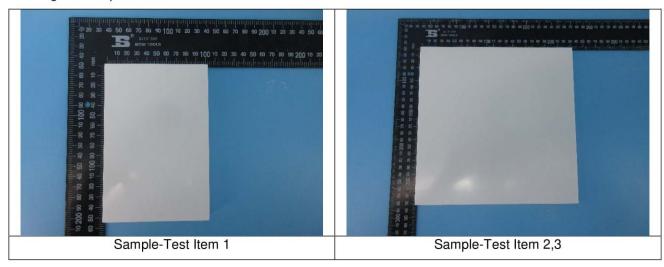


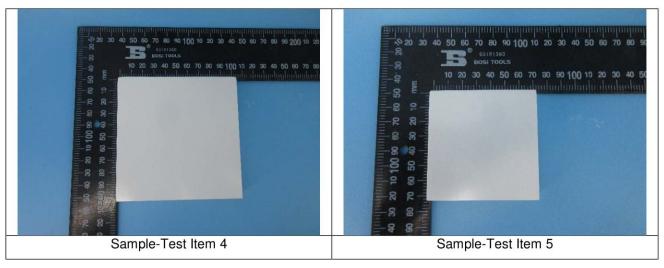
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## Original Sample Photo:





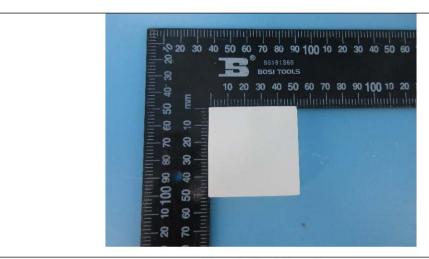




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Sample-Test Item 6



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Test Item 1: Abrasion Resistance Sample Description: See photo Test Method: EN 14617-4:2012

Test Condition:

Specimens: 150mm×100mm×12.10mm, 6pcs

Test Result:

Specimens identification No.	1	2	3	4	5	6
The length of the groove	28.0	29.5	28.5	30.0	28.0	28.0
(mm)	20.0	20.0	20.0	00.0	20.0	20.0

Test Item 2: Impact Resistance Sample Description: See photo Test Method: EN 14617-9:2005

Test Condition:

Specimens: 230mm×230mm×11.85mm, 4pcs

Test Result:

Specimens identification No.	1	2	3	4
Fracture work, L (J)	7.02	6.52	6.52	6.03
Average value (J)		6.	52	

Note: The fracture work L in joule is expressed by the formula

 $L=M\times h\times g$ 

Where

M is the sphere mass, 1.008kg

h is the drop height in meters of the sphere which causes the sample to break

g is the gravity acceleration equal to 9.806m/s<sup>2</sup>



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Test Item 3: Resistance to Dry Heat Sample Description: See photo

Test Method: EN 438-2:2016 Section 16

Test Condition:

Specimen: 230×230×12.08mm

Condition: 160°C, 20min

Test result: Rating 5
Expression of results:

Rating	Description
5	No change
3	test area indistinguishable from adjacent surrounding area
	Minor change
4	Test area distinguishable from adjacent surrounding area, only when the light source is
4	mirrored on the test surface and is reflected towards the observer's eye, e. g.
	discoloration, change in gloss and colour
	Moderate change
3	Test area distinguishable from adjacent surrounding area, visible in several viewing
3	directions, e.g. discoloration, change in gloss and colour, no change in the surface
	structure, e.g. deformation, cracking, blistering
	Significant change
2	Test area clearly distinguishable from adjacent surrounding area, visible in all viewing
2	directions, e. g. discoloration, change in gloss and colour, and / or structure of the
	surface slightly changed, e.g. slight cracking, slight blistering
	Strong change
4	the structure of the surface being distinctly changed e.g. strong cracking, strong
1	blistering and /or discoloration, change in gloss and colour, and / or the surface
	material being totally or partially delaminated



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Test Item 4: Apparent Density and Water Absorption

Sample Description: See photo Test Method: EN 14617-1:2013

Test Condition:

Specimens: 100mm×100mm×10.02mm, 6pcs

## Test Result:

Specimens identification No.	1	2	3	4	5	6
Water absorption (%)	0.04	0.03	0.04	0.03	0.03	0.03
Arithmetic mean of the water absorption (%)			0.0	03		
Apparent density (kg/m³)	1879	1879	1891	1893	1894	1902
Arithmetic mean of the apparent density (kg/m³)			18	90		





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Test Item 5: Resistance to Stain Sample Description: See photo

Test Method: EN 14617-10:2012 Annex A

Test Condition:

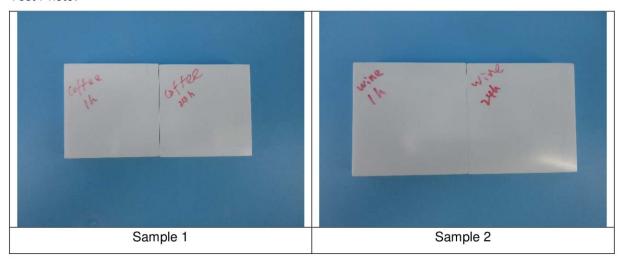
Specimen:70mm×70mm×11.96mm, 8pcs

Test reagents: (1) Coffee, (2) Wine, (3) Cola, (4) Cement or grout

#### Test Result:

Test reagents	Sample NO.	Results
Coffee	1 (1h)	No obvious change
Coffee	1 (24h)	No obvious change
Wina	2 (1h)	No obvious change
Wine	2 (24h)	No obvious change
Cola	3(1h)	No obvious change
Oola	3 (24h)	No obvious change
Cement grout	4(1h)	No obvious change
Someth grout	4 (24h)	No obvious change

## Test Photo:





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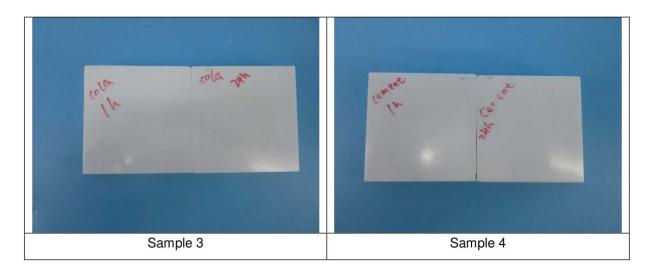
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Test Item 6: Resistance to Immersion in Boiling Water

Sample Description: See photo

Test Method: EN 438-2:2016 Section 12

Test Condition:

Specimen: 50×50×11.90mm

Condition: Immersion in boiling water for 2h →Immersion in cooling water for 15min

Test result:

Mass increase: 0.14% Thickness increase: 0.29% Surface appearance: Rating 5 Edge appearance: Rating 5

Expression of surface rating scale results:

Rating	Description
5	No visible change
4	Slight change of gloss and/or colour, only visible at certain viewing angles
3	Moderate change of gloss and/or colour
2	Marked change of gloss and/or colour or surface blistering
1	Surface layers delamination.



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## Expression of edge rating scale results:

Rating	Description
5	No visible change
4	Slight hairline edge cracks visible to the naked eyes
3	Moderate edge cracks
2	Severe edge cracks
1	Core layers delamination

Test Item 7: Flexural Test

Sample Description: Plastic part

Test Method: EN ISO 178:2019 Method A

Test Condition:

Specimen: 80mm×9.98mm×3.99mm

Testing speed: 2mm/min

Span: 64mm

Lab Environmental Condition: (23±2) °C, (50±5)%RH

#### Test Result:

Test Item	Test Result
Flexural Strength	53.2MPa
Flexural Modulus	10200MPa



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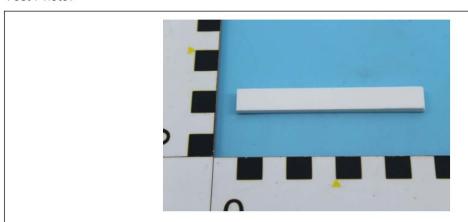


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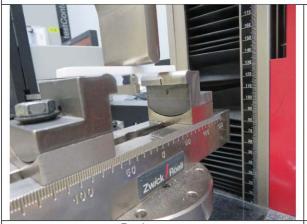
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## Test Photo:



Original sample











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Test Item 8: Izod Unnotched Impact Strength

Sample Description: Plastic part

Test Method: EN ISO 180:2000/Amd.2:2013

Test Condition:

Specimen: ISO 180/U

Specimen thickness: 4.14mm

The capacity of the pendulum: 1J

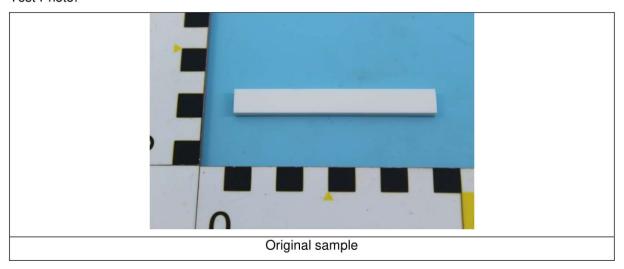
Impact speed: 3.46 m/s

Lab Environmental Condition: 23  $\pm$  2  $^{\circ}$ C, 50  $\pm$  5  $^{\circ}$ RH

#### Test Result:

Test Item	Test Result
Izod Unnotched Impact Strength	2.9kJ/m²
1200 Official impact off engin	C (Complete break)

## Test Photo:





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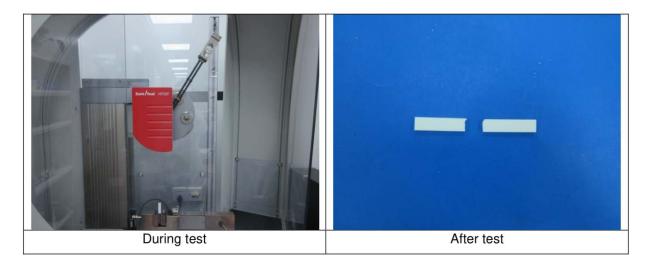
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Test Item 9: Tensile Modulus Sample Description: Plastic part

Test Method: EN ISO 527-1:2012 & EN ISO 527-2:2012

Test Condition:

Specimen: Type 1A

Specimen thickness: 11.77 mm

Testing speed: 1 mm/min Gauge length: 75 mm

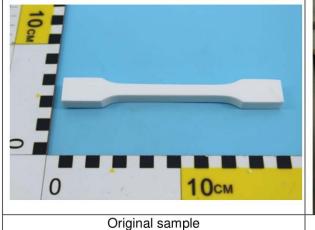
Initial distance between grips: 115 mm

Lab Environmental Condition: 23 ± 2 °C, 50 ± 5 % RH

#### Test Result:

Test Item	Test Result
Tensile Modulus	9610MPa

## Test Photo:





During test



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Test Item 10: Tensile Test

Sample Description: Plastic part

Test Method: EN ISO 527-1:2012 & EN ISO 527-2:2012

Test Condition:

Specimen: Type 1A

Specimen thickness: 11.82 mm

Testing speed: 5 mm/min

Gauge length: 75 mm

Initial distance between grips: 115 mm

Lab Environmental Condition: 23 ± 2 °C, 50 ± 5 % RH

#### Test Result:

Test Item	Test Result
Tensile Strength	37.0MPa
Tensile Strain at Break	0.47%



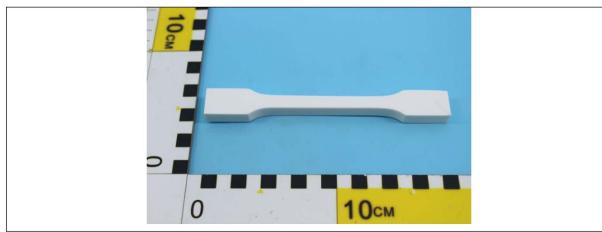


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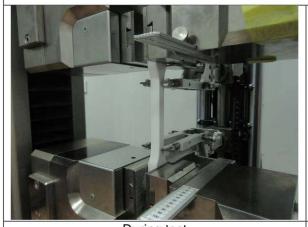
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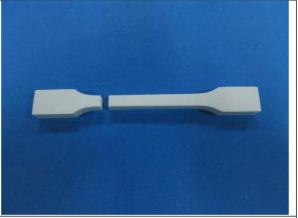
## Test Photo:



Original sample







After test

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



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