

TEST REPORT

No. : SHIN190100272CCM

Date : Feb. 15, 2019

Page: 1 of 3

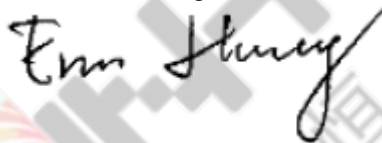
CUSTOMER NAME: CHANGZHOU SUN PLUS LAMINATE CO., LTD.
ADDRESS: WEIXING INDUSTRY AREA, CUIQIAO, HENGLIN TOWN,
CHANGZHOU, JIANGSU, 213103, P. R. CHINA

Sample Name : HIGH PRESSURE LAMINATE
Style No. : 0.8mm
Supplier : Sun Plus

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.

Test Required : Density
Test Method : EN 438-3:2016 & EN ISO 1183-1:2012
SGS Ref. No. : CZHL1901000033OT
Date of Receipt : Jan. 23, 2019
Testing Start Date : Jan. 23, 2019
Testing End Date : Feb. 15, 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 (Shanghai) Co., Ltd.



Erin Huang
Authorized signatory



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
Testing Center Commercial Construction Material Laboratory

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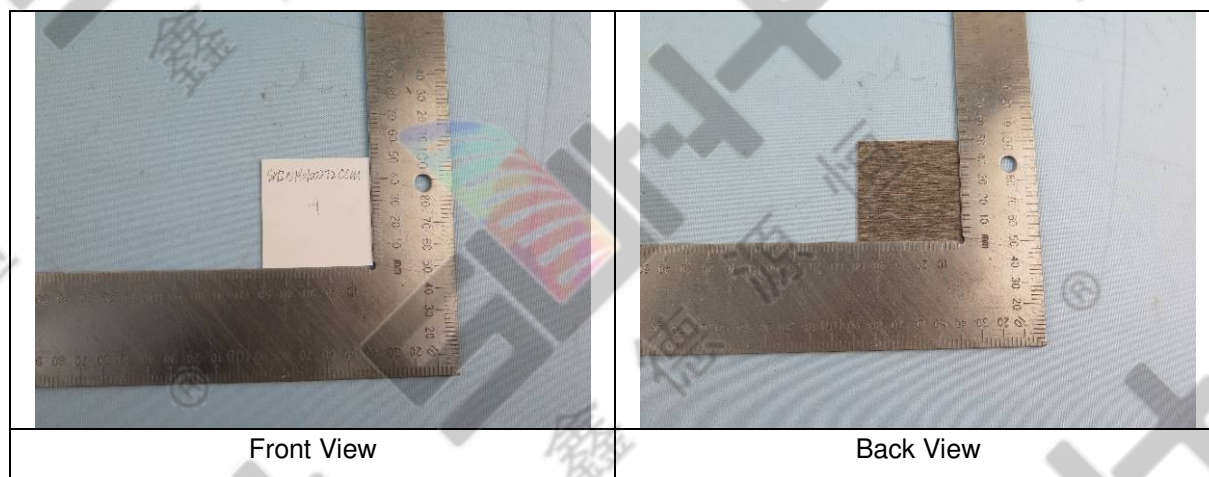
Page: 2 of 3

Summary of Result(s):

No.	Test Item	Test Method	Result	Conclusion
1	Density	EN 438-3:2016 & EN ISO 1183-1:2012	1.459 g/cm ³	/

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/: Not Apply to the judgment.

Original sample photo(s):



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Test item: Density

Test method: EN 438-3:2016 & EN ISO 1183-1:2012

Test condition:

Specimen: 50mm×50mm×0.8mm, 3 pcs

Water temperature: 17℃

Lab environmental condition: 23±2℃, 50±5%RH

Test result:

Test Item	Test Result			
	Individual value			Average value
Density (g/cm ³)	1.467	1.458	1.452	1.459

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

In the territory of the People's Republic of China, the test report without CMA logo expresses the test report shall only be used for client scientific research, teaching, internal quality control, product research and development, etc...and just for client internal reference.



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Test Report

No. SDHL1902002254HI

Date: Mar.01, 2019

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CHANGZHOU SUN PLUS LAMINATE CO.,LTD
WEIXING INDUSTRY AREA, CUIQIAO, HENGLIN TOWN, CHANGZHOU, JIANGSU, 213103, P.R.CHINA

The following sample(s) was / were submitted and identified on behalf of the client as:

Sample Description : HIGH PRESSURE LAMINATE
SGS Ref No. : CZHL1901000033OT
Style No. : 0.8MM
Supplier : SUN PLUS
Sample Receiving Date : Jan.28, 2019
Test Performing Date : Feb.18, 2019 to Mar.01, 2019

Test Result Summary

No.	Test item	Test(s) Requested(Method)	Result(s)	Comments
1	Resistance to immersion in boiling water	EN 438-7:2005 Clause 4.13.1 & EN 438-2:2005 Clause 12	Refer to next page(s)	/
2	Resistance to wet conditions	EN 438-7:2005 Clause 4.13.2 & EN 438-2:2005 Clause 15	Refer to next page(s)	/
3	Density	EN 438-7:2005 Clause 4.13.1 & EN 438-7:2005 Clause 4.13.2 & EN ISO 1183-1:2004 Method A	Pass	/

For further details, please refer to the following page(s)

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



Peter Zhao

Peter Zhao
Approved signatory



SGS-CSTC Shunde Branch
Shunde Branch Harbin

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Test Report

No. SDHL1902002254HI

Date: Mar.01, 2019

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Test Information:

Sample description: See photo

1. Test item: Resistance to immersion in boiling water

Test method: EN 438-7:2005 Clause 4.13.1 & EN 438-2:2005 Clause 12

Test conditions:

Place the specimens in the vessel of boiling distilled water. After (120 ± 5) min, remove the specimens from the boiling water and allow to cool for (15 ± 5) min in the vessel of distilled water maintained at $(23 \pm 2) ^\circ\text{C}$

Test environment: $(23 \pm 2) ^\circ\text{C}$, $(50 \pm 5)\% \text{RH}$

Test results:

Sample	Test results			Conclusion
A	Quality	6.59%		/
	Thickness	7.28%		/
	Appearance	Gloss finish	Rating 5	/
		Other finishes	Rating 5	/

Note: In EN 438-2:2005 Clause 12.5, Rating 5 is the best and Rating 1 is the worst.



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2. Test item: Resistance to wet conditions

Test method: EN 438-7:2005 Clause 4.13.2 & EN 438-2:2005 Clause 15

Test conditions:

Place the specimens are totally immersed in water at $(65 \pm 2) ^\circ\text{C}$. After 48 h, remove the specimens from the water. bath and immerse for (15 ± 5) min in the vessel containing distilled water at $(23 \pm 2) ^\circ\text{C}$.

Test environment: $(23 \pm 2) ^\circ\text{C}$, $(50 \pm 5)\% \text{RH}$

Test results:

Sample	Test results		Conclusion
A	Quality	7.33%	/
	Appearance	Rating 5	/

Note: In EN 438-6:2005 Clause 15.5, Rating 5 is the best and Rating 1 is the worst.

3. Test item: Density

Test method: EN 438-7:2005 Clause 4.13.1 & EN 438-7:2005 Clause 4.13.2 & EN ISO 1183-1:2004 Method A

Test conditions:

Immersion method

Test environment: $(23 \pm 2) ^\circ\text{C}$, $(50 \pm 5)\% \text{RH}$

Test results:

Sample	Density	Requirement of standard EN 438-4:2005 Table 3(CGS)	Requirement of standard EN 438-6:2005 Table 3(EGS)	Conclusion
A	1.39 g/cm ³	$\geq 1.35 \text{ g/cm}^3$		Pass



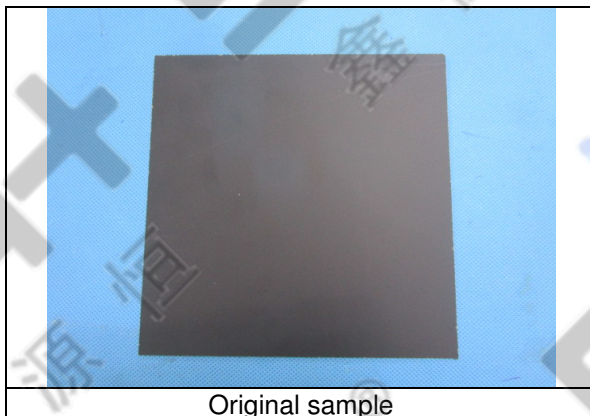
Test Report

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Photo Appendix:



Original sample

End of Report



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Inspection & Testing Services
Shunde Branch Harbin

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Test Report

No.: SHHL1901004220BM

Date: FEB. 25, 2019

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CHANGZHOU SUN PLUS LAMINATE CO., LTD

WEIXING INDUSTRY AREA, CUIQIAO, HENGLIN TOWN, CHANGZHOU, JIANGSU, 213103,
P.R.CHINA

Sample Description : HIGH PRESSURE LAMINATE
SGS Ref. No. : CZHL1901000033OT
Style No. : 0.8MM
Supplier : SUN PLUS
Sample Receiving Date : JAN. 23, 2019
Testing Period : JAN. 23, 2019 TO FEB. 25, 2019
Testing Location : 3RD BUILDING, LANE 3999, XIUPU ROAD, PUDONG
NEW AREA, SHANGHAI
Test Performed : SELECTED TEST(S) AS REQUESTED BY APPLICANT
Test Requested : 1. RESISTANCE TO SURFACE WEAR (EN 438-2:2016
CLAUSE 10)
2. RESISTANCE TO WATER VAPOUR(EN 438-2:2016
CLAUSE 14)
3. RESISTANCE TO DRY HEAT (EN 438-2:2016 CLAUSE
16)
4. RESISTANCE TO IMPACT BY LARGE DIAMETER
BALL (EN 438-2:2016 CLAUSE 21)
5. RESISTANCE TO CRACKING UNDER STRESS
(LAMINATES \leq 2MM THICK) (EN 438-2:2016 CLAUSE
23)
6. RESISTANCE TO SCRATCHING (EN 438-2:2016
CLAUSE 25)
7. RESISTANCE TO STAINING (EN 438-2:2016 CLAUSE
26)
8. RESISTANCE TO CIGARETTE BURNS (EN 438-2:2005
CLAUSE 30)



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Test Result(s) : FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)

Conclusion : THE TEST DATA WERE PROVIDED TO CLIENT FOR THEIR OWN ANALYSIS.

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Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Yomoro Gu



Yomoro Gu
Authorized Signatory



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Test Conducted:

1. Resistance to surface wear (EN 438-2:2016 clause 10)
2. Resistance to water vapour (EN 438-2:2016 clause 14)
3. Resistance to dry heat (EN 438-2:2016 clause 16)
4. Resistance to impact by large diameter ball (EN 438-2:2016 clause 21)
5. Resistance to cracking under stress (laminates ≤ 2 mm thick) (EN 438-2:2016 clause 23)
6. Resistance to scratching (EN 438-2:2016 clause 25)
7. Resistance to staining (EN 438-2:2016 clause 26)

Test property	Test Procedure/Requirement	Rating/Result
Resistance to surface wear	<p>Perform the test immediately after removal of the specimen and calibrated abrasive paper from the preconditioning atmosphere.</p> <p>Prepare two wheels with preconditioned unused abrasive paper from the same batch previously approved by calibration. Fit the wheels to the machine and set the revolution counter to zero.</p> <p>Clamp the specimen in the holder, ensuring that the surface of the specimen is flat. Lower the abrasive wheels on to the specimen, start the suction device and begin abrading the specimen.</p> <p>Replace the abrasive paper after 500 revolutions.</p> <p>At the beginning of the test, examine the specimen for wear after each 25 revolutions. Continue the test until the initial wear point (IP) is reached.</p> <p>The initial wear point (IP) is that point at which the first clearly recognisable wear-through of the print, pattern or plain colour appears and the sub-layer becomes visible in three quadrants. The initial wear point is reached when there are areas of at least 0,60 mm² wear-through in two quadrants.</p> <p>Record the IP as the number of revolutions, Repeat the test immediately using the two remaining test specimens.</p>	IP: 650 revolutions
Resistance to water vapour	<p>Place approximately 200 ml of water in the flask and bring it to the boil on the electric hotplate. Place the heat screen in position around the neck of the flask. Place the specimen, decorative face down, centrally over the mouth of the flask and fix it in position with the wire specimen holder.</p> <p>The specimen holder shall be heavy enough to prevent the specimen from curling away from the mouth of the flask.</p> <p>After the decorative face has been exposed for 1 h to the vapour from the boiling water, remove the specimen and use the filter paper or tissue to remove excess water from the surface of the specimen.</p> <p>Allow the specimen to recover for 24 h in normal ambient conditions and then examine the central area of the specimen</p>	Rating 5



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Test property	Test Procedure/Requirement	Rating/Result						
	<p>with the naked eye, corrected if necessary, for any change in appearance. The circular area where the specimen is direct contact with the flask neck shall be excluded from the judgement.</p> <p>The result of the examination for change in appearance shall be expressed in accordance with the following rating scale:</p> <p>Rating 5: No visible change.</p> <p>Rating 4: Slight change of gloss and/or colour, only visible at certain viewing angles.</p> <p>Rating 3: Moderate change of gloss and/or colour.</p> <p>Rating 2: Marked change of gloss and/or colour.</p> <p>Rating 1: Blistering and/or delamination.</p>							
Resistance to dry heat	<p>The test surface shall be placed horizontally. In case of laminates thick 2 mm or greater, without need of gluing on chipboard, if thickness of sample less than 2mm, bonding the specimen to the backboard as specified requirement.</p> <p>The test surface shall be lightly wiped with a cleaning cloth before the test.</p> <p>Using the oven, raise the temperature of the heat source to a temperature higher than the specified test temperature. Place the thermometer or other means of measuring temperature in the centre bore of the heat source. If the temperature is not higher than the specified test temperature, the heat source shall be placed again in the oven until achieving this higher temperature.</p> <p>When the heat source reaches the temperature of 160 °C with an accuracy of ± 1 °C, immediately place it on the test surface. After 20 min in this position, remove the block. Allow the test surface to stand undisturbed 1 h + 10 min. Clean the test surface with the cleaning cloth and examine the tested area. Carefully examine the test surface, with light coming from all directions, for damage, e.g. discoloration, change in gloss and colour, blistering, swelling and other defects. Viewing distance shall be 0,25 m to 1,0 m.</p> <p>The result of the examination for surface disturbance shall be expressed in accordance with the rating scale reported in below table.</p> <table><tr><th>Rating scale</th><th>Description</th></tr><tr><td>5</td><td>No change test area indistinguishable from adjacent surrounding area</td></tr><tr><td>4</td><td>Minor change test area distinguishable from adjacent surrounding area, only when the light source is</td></tr></table>	Rating scale	Description	5	No change test area indistinguishable from adjacent surrounding area	4	Minor change test area distinguishable from adjacent surrounding area, only when the light source is	Rating 5
Rating scale	Description							
5	No change test area indistinguishable from adjacent surrounding area							
4	Minor change test area distinguishable from adjacent surrounding area, only when the light source is							



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Test property	Test Procedure/Requirement		Rating/Result
		mirrored on the test surface and is reflected towards the observer's eye, e. g. discoloration, change in gloss and colour	
	3	Moderate change test area distinguishable from adjacent surrounding area, visible in several viewing directions, e. g. discoloration, change in gloss and colour, no change in the surface structure, e.g. deformation, cracking, blistering	
	2	Significant change test area clearly distinguishable from adjacent surrounding area, visible in all viewing directions, e. g. discoloration, change in gloss and colour, and / or structure of the surface slightly changed, e.g. slight cracking, slight blistering	
	1	Strong change the structure of the surface being distinctly changed e.g. strong cracking, strong blistering and /or discoloration, change in gloss and colour, and / or the surface material being totally or partially delaminated	
Resistance to impact by large diameter ball	<ol style="list-style-type: none"> The test shall be carried out in the laboratory atmosphere. Clamp the specimen in the clamping frame (see 21.3.3) and place the assembly on the solid base of the free-fall test apparatus (see 21.3.1). Cover the specimen with a sheet of carbon paper with its coated face in contact with the decorative surface. Adjust the height scale so that its base is touching the face of the specimen. Position the electromagnet at any arbitrary height (the specification limit for the material under test is a useful starting point). Place the steel ball (see 21.3.2) on the energized electromagnet. Operate the release mechanism so that the ball falls on the specimen, catching the ball on the first rebound so that multiple impacts do not occur. Examine the surface tested for damage at the point of impact. If cracking is evident, or the carbon imprint is greater than the diameter specified, lower the electromagnet and repeat the test. If no cracking is evident and the imprint is smaller than the specified diameter, raise the electromagnet and repeat the test. The distance between points of impact, and between points of impact and the edge of the specimen, shall be at least 50 mm. For referee purposes, only one impact per specimen shall be made, with the point of impact as near 		<p>Impact height: 2.4m</p> <p>Remark: The Max. height of the impact device is 2.4m</p>



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Test property	Test Procedure/Requirement	Rating/Result
	<p>as possible to the centre of the specimen.</p> <p>6. Repeat the above procedure, as necessary, to determine the impact resistance of the laminate under test.</p>	
Resistance to cracking under stress(laminate $\leq 2\text{mm}$ thick)	<p>Measure the thickness of the laminate under test.</p> <p>Pre-condition the specimens for 72h in a standard atmosphere of $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity.</p> <p>Pre-heat the clamping device in the oven for 2h at $(50 \pm 2)^{\circ}\text{C}$.</p> <p>Take the specimen under test from the conditioning chamber, place it immediately in the pre-heated clamping device, and tighten the nuts firmly to prevent movement of the specimen.</p> <p>Male reference marks on the surface of the specimen adjacent to each clamping block to confirm absence of movement.</p> <p>Place the clamping device containing the specimen in the oven at $(50 \pm 2)^{\circ}\text{C}$.</p> <p>After $(6 \pm 0.25)\text{h}$, remove the device from the oven, check the reference marks to ensure that the specimen has not moved, and immediately examine the specimen (while still hot and clamped in the device) with the naked eye and under x6 magnification for signs of cracking around the hole. The light intensity during the examination shall be 800 lux to 1000 lux.</p> <p>If there is any evidence of movement of the specimen in the clamps during the 6h test period, discard the specimen without examination and repeat the whole procedure using a new specimen.</p> <p>Test two further specimens using the same procedure.</p> <p>Rating 5: No evidence of cracking.</p> <p>Rating 4: Hairline cracks only visible under x6 magnification.</p> <p>Rating 3: Cracks visible with normal vision(corrected if necessary) from the edge of the hole, but not extending to either edge of the specimen.</p> <p>Rating 2: A crack visible with normal vision (corrected if necessary) from the edge of the hole, extending to one edge of the specimen such that the specimen is not broken into two pieces.</p> <p>Rating 1: Specimen broken into two pieces.</p>	Rating 5



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Test property	Test Procedure/Requirement	Rating/Result																		
Resistance to scratching	<p>Start the test by making two scratches at 1,0 N load with a spacing of 1 mm to 2 mm between the scratch marks. On the same specimen repeat this procedure with loads of 2,0 N, 4,0 N, and 6,0 N, leaving a space of 3 mm to 5 mm between each pair of scratches.</p> <p>Remove the specimen from the apparatus and rub the entire scratched area of the surface with a suitable contrast medium so that it is engrained in any scratches.</p> <p>Carefully wipe the surface with clean cotton fabric to remove any excess contrast medium which is not engrained in a scratch.</p> <p>Examine the surface to determine the lowest load for which an almost continuous (i.e. > 90 %) double circle of scratch marks can be seen.</p> <p>The scratch resistance of the laminate under test shall be expressed in accordance with the rating scale</p> <p>Scratch resistance rating scale</p> <table> <tr> <td>Rating scale</td><td>Discontinuous scratches, or faint superficial marks, or no visible marks</td><td>≥ 90 % continuous double circle of scratch marks clearly visible</td></tr> <tr> <td>Rating 5</td><td>6N</td><td>>6N</td></tr> <tr> <td>Rating 4</td><td>4N</td><td>6N</td></tr> <tr> <td>Rating 3</td><td>2N</td><td>4N</td></tr> <tr> <td>Rating 2</td><td>1N</td><td>2N</td></tr> <tr> <td>Rating 1</td><td></td><td>1N</td></tr> </table>	Rating scale	Discontinuous scratches, or faint superficial marks, or no visible marks	≥ 90 % continuous double circle of scratch marks clearly visible	Rating 5	6N	>6N	Rating 4	4N	6N	Rating 3	2N	4N	Rating 2	1N	2N	Rating 1		1N	Rating 1
Rating scale	Discontinuous scratches, or faint superficial marks, or no visible marks	≥ 90 % continuous double circle of scratch marks clearly visible																		
Rating 5	6N	>6N																		
Rating 4	4N	6N																		
Rating 3	2N	4N																		
Rating 2	1N	2N																		
Rating 1		1N																		



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Test property	Test Procedure/Requirement	Rating/Result												
Resistance to staining	<p>The test shall be carried out in a test at ambient temperature. The test surface shall be placed horizontally. It shall be tested with the chosen test liquids at points which shall be not less than 60 mm apart, from centre to centre, and if possible, with centres not less than 40 mm from any edge of the test surface. The test surface shall be lightly wiped with a cleaning cloth before testing.</p> <p>Immerse a disc into the staining agent between 30 s and 60 s, lift with the tweezers and quickly wipe off the edge of the disc once against the edge of the vessel. Quickly place it on the test surface and immediately cover with an inverted glass Petri dish. The filter paper shall not be in contact with the edge of the glass Petri dish.</p> <p>After the required test period, remove the glass Petri dish and lift off the disc with the tweezers. Soak up any remaining test liquid with the absorbent paper without rubbing.</p> <p>Then wash the test surface as specified procedure. After washing, leave the test surface undisturbed, without covering it, for 30 min.</p>	See result 1												
	<table><tr><th>Rating scale</th><th>Description</th></tr><tr><td>5</td><td>No change test area indistinguishable from adjacent surrounding area</td></tr><tr><td>4</td><td>Minor change test area distinguishable from adjacent surrounding area, only when the light source is mirrored on the test surface and is reflected towards the observer's eye, e. g. discoloration, change in gloss and colour</td></tr><tr><td>3</td><td>Moderate change test area distinguishable from adjacent surrounding area, visible in several viewing directions, e. g. discoloration, change in gloss and colour</td></tr><tr><td>2</td><td>Significant change test area clearly distinguishable from adjacent surrounding area, visible in all viewing directions, e. g. discoloration, change in gloss and colour, and / or structure of the surface slightly changed, e.g. cracking, blistering</td></tr><tr><td>1</td><td>Strong change the structure of the surface being distinctly changed and / or discoloration, change in gloss and colour, and / or the surface material being totally or partially delaminated</td></tr></table>		Rating scale	Description	5	No change test area indistinguishable from adjacent surrounding area	4	Minor change test area distinguishable from adjacent surrounding area, only when the light source is mirrored on the test surface and is reflected towards the observer's eye, e. g. discoloration, change in gloss and colour	3	Moderate change test area distinguishable from adjacent surrounding area, visible in several viewing directions, e. g. discoloration, change in gloss and colour	2	Significant change test area clearly distinguishable from adjacent surrounding area, visible in all viewing directions, e. g. discoloration, change in gloss and colour, and / or structure of the surface slightly changed, e.g. cracking, blistering	1	Strong change the structure of the surface being distinctly changed and / or discoloration, change in gloss and colour, and / or the surface material being totally or partially delaminated
	Rating scale		Description											
	5		No change test area indistinguishable from adjacent surrounding area											
	4		Minor change test area distinguishable from adjacent surrounding area, only when the light source is mirrored on the test surface and is reflected towards the observer's eye, e. g. discoloration, change in gloss and colour											
	3		Moderate change test area distinguishable from adjacent surrounding area, visible in several viewing directions, e. g. discoloration, change in gloss and colour											
	2		Significant change test area clearly distinguishable from adjacent surrounding area, visible in all viewing directions, e. g. discoloration, change in gloss and colour, and / or structure of the surface slightly changed, e.g. cracking, blistering											
1	Strong change the structure of the surface being distinctly changed and / or discoloration, change in gloss and colour, and / or the surface material being totally or partially delaminated													



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Result 1: Resistance to staining

	Staining agent	Contacting time	Rating
1	Acetone	16 hours	4
2	Coffee	16 hours	4
3	Sodium hydroxide (25%)	10 minutes	5
4	Hydrogen peroxide (30%)	10 minutes	5
5	Shoe Polish	10 minutes	5



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8. Resistance to cigarette burns (EN 438-2:2005 Clause 30)

Test Property	Test procedures/requirements	Rating/ Result
Resistance to cigarette burns	<p>Ignite the cigarette and let it burn to consume a length of approximately 10mm.</p> <p>Place the burning cigarette in full-length contact with the horizontal surface of the specimen in a draught-free area so that the glued seam of the cigarette is not in contact with the specimen. Allow the cigarette to continue burning until an additional 20mm length is consumed. If the cigarette goes out before this occurs, repeat the test.</p> <p>Remove any superficial combustion residues with a soft cloth moistened with ethanol. Examine the surface with the naked eye, corrected if necessary, for any changes such as discolouration, cracks or blisters.</p> <p>Rating 5: No visible change.</p> <p>Rating 4: Slight change of gloss only visible at certain viewing angles and/or slight brown stain.</p> <p>Rating 3: Moderate change of gloss and/or moderate brown stain.</p> <p>Rating 2: Severe brown mark, but no destruction of the surface.</p> <p>Rating 1: Blistering and/or cracks.</p>	Rating 5

The declaration of conformity is only based on the actual value of laboratory activity, measurement uncertainty of the results not take into account.



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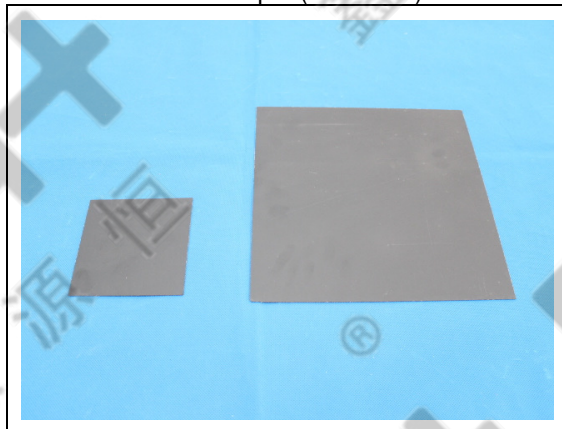
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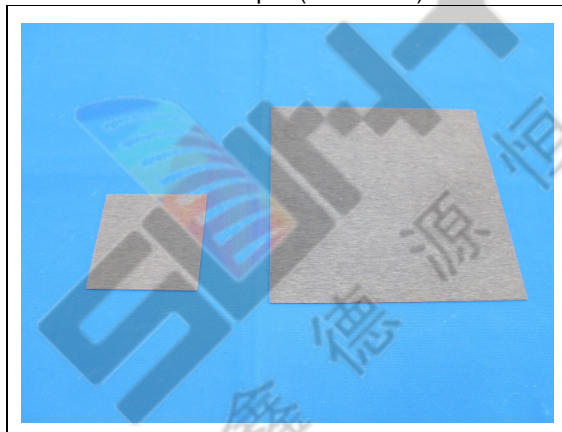
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Sample Photo:

Test sample (front side)



Test sample (back side)



SGS authenticate the photo on original report only

End of Report



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Test Report

No. SHAHG1901602301

Date: 22 Feb 2019

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CHANGZHOU SUN PLUS LAMINATE CO., LTD

WEIXING INDUSTRY AREA, CUIQIAO, HENGLIN TOWN, CHANGZHOU, JIANGSU, 213103, P.R.CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : HIGH PRESSURE LAMINATE

SGS Job No. : CZHL1901000033OT - SH
 Style No. : 0.8mm
 Supplier : SUN PLUS
 Date of Sample Received : 22 Jan 2019
 Testing Period : 22 Jan 2019 - 22 Feb 2019
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
Formaldehyde Emission	PASS

Signed for and on behalf of
 SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Jenny Yao

Jenny Yao
 Approved Signatory



SHAHG1901602301



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Test Report

No. SHAHG1901602301

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA19-016023.001	Black brown board

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Formaldehyde Emission

Test Method : With reference to EN 717-1:2004, analysis was performed by UV-Vis.

Test Item(s)	Limit	Unit	MDL	001
Formaldehyde Emission (In air)	<=0.13	mg/m ³	0.080	ND

Notes :

The maximum permissible limit is quoted from the client requirement.



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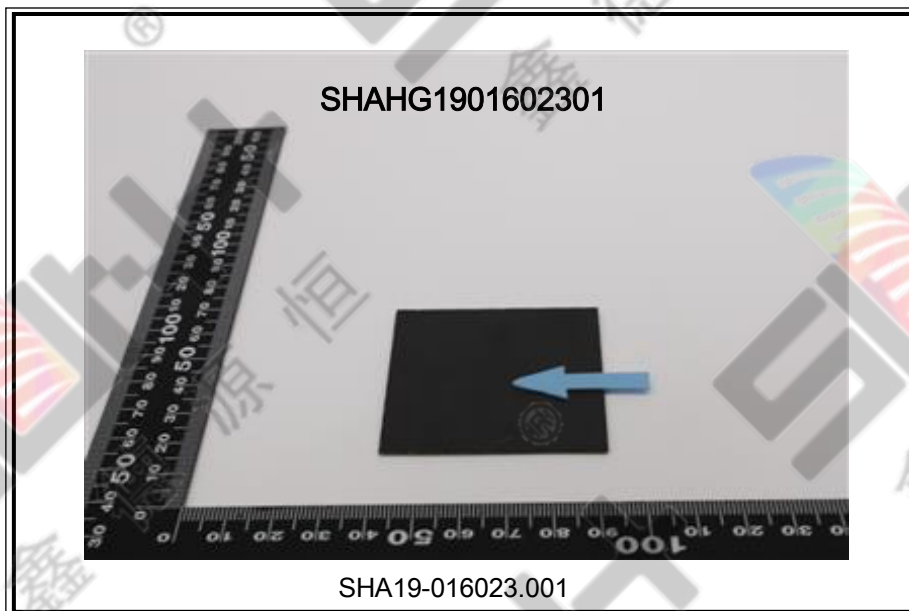
Test Report

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Sample photo:



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