

No.: XMIN170400537CCM

Date: Apr.12, 2017

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CUSTOMER NAME: XIAMEN LUCK STONE CO., LTD

ADDRESS: UNIT 902, NO.241 XIANYUE ROAD, XIAMEN 361012, CHINA

Q8374E Sample Name

Material **Engineered Quartz**

Manufacturer XIAMEN LUCK STONE CO., LTD

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 Selected test(s) as requested by applicant

Date of Receipt Apr.05, 2017 **Testing Start Date** Apr.05, 2017 **Testing End Date** Apr.12, 2017

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)

******** To be continued*******

Signed for

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

Civi Huang

Authorized Signatory



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Summary of results:

(Average value)

Test item(s)	Test method(s)	Test result(s)	
Absorption by weight	Defends ACTM COZ/COZM 15	0.05 %	
Density	Refer to ASTM C97/C97M-15	2334 kg/m ³	
	Defeate ACTM C000/C000M 15	Dry condition: 42.7 MPa	
Flexural strength	Refer to ASTM C880/C880M-15	Wet condition: 42.9 MPa	
Compressive strongth	Pofor to ASTM C170/C170M 16	Dry condition: 282 MPa	
Compressive strength	Refer to ASTM C170/C170M-16	Wet condition: 264 MPa	
Stain resistance test (polished)	Refer to ANSI Z124.6-2007	Total stain resistance value:46 Maximum individual depth of staining: 0.02mm	

****** To be continued******



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1. Absorption by weight and density

Test Method:

Refer to ASTM C97/C97M-15 Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension

Specimens: artificial stone with one face polished, 50mm×50mm×20mm, 5pcs

Test Result:

Specimens identification No.	1	2	3	4	5
Absorption by weight (%)	0.05	0.05	0.06	0.06	0.05
Mean water absorption (%)	0.05				
Density (kg/m³)	2335	2333	2333	2334	2337
Mean density (kg/m³)	2334				

******* To be continued******



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2. Flexural strength

Test Method:

Refer to ASTM C880/C880M-15 Standard Test Method for Flexural Strength of Dimension Stone

Specimens: artificial stone with one face polished, 350mm×100mm×20mm, 10pcs

Span: 200mm **Test Result:**

Dry Condition:

Specimens identification No.	1	2	3	4	5
Individual flexural strength value (MPa)	42.9	45.6	41.8	43.9	39.4
Mean flexural strength value (MPa)	42.7				
Standard deviation (MPa)			2.4		

Wet Condition:

Specimens identification No.	1	2	3	4	5
Individual flexural strength value (MPa)	44.7	43.0	43.5	43.2	39.9
Mean flexural strength value (MPa)	42.9				
Standard deviation (MPa)			1.8		

****** To be continued******



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3. Compressive strength

Test Method:

Refer to ASTM C170/C170M-16 Standard Test Method for Compressive Strength of Dimension Stone Specimens: artificial stone with one face polished, 50mm×50mm×20mm, 10pcs

Test Result:

Dry Condition:

Specimens identification No.	1	2	3	4	5
Individual compressive strength value (MPa)	288	275	281	281	284
Mean compressive strength value (MPa)	282				
Standard deviation (MPa)			5		

Wet Condition:

Specimens identification No.	1	2	3	4	5
Individual compressive strength value (MPa)	261	271	263	265	260
Mean compressive strength value (MPa)	264				
Standard deviation (MPa)			5		

******* To be continued******



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4. Stain resistance test

Test Method:

Refer to ANSI Z124.6-2007 Plastic Sinks - 5.2 Stain resistance test

Specimens: artificial stone with one face polished, 100mm×100mm×20mm, 11pcs

Testing surface: polished

Test Result:

	Test results					
Reagents	(Cove	ered)	(Uncovered)			
	Individual stain rating	Depth removed	Individual stain rating	Depth removed		
Black Crayon	1	/	1	/		
Black Liquid Shoe Polish	1	/	1	/		
Blue Washable Ink	2	/	2	/		
Gentian Violet Solution	5	0.02mm	5	0.02mm		
Beet Juice	1	/	1	/		
Grape Juice	1	/	1	/		
Lipstick	1	/	1	/		
Hair Dye	5 0.02mm		5	0.02mm		
lodine solution	5	0.02mm	5	0.02mm		
Wet Tea Bag	1	/	1	/		
Total stain resistance rating	46					
Maximum individual depth of staining	0.02mm					

Note: According to ANSI Z124.6-2007 - 5.2.1.1~5.2.1.5, total stain resistance rating shall be ≤ 64 and maximum individual depth of staining shall be 0.127mm. Individual stain rating as below:

- 1 non-staining, removable by tap water;
- 2 removable by alcohol or naphtha;
- 3 removable by first application of standard scouring powder;
- 4 removable by two standard scouring powder scrubbings;
- 5 Any specimen with stain remaining after the aforementioned cleanings.

Any specimen with stain remaining after the above cleanings shall be tested to determine the depth of staining. The affected area shall be sanded with 600 grit abrasive until the stain is removed. The depth shall be measured.

****** To be continued******



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Specimen photograph:



SGS authenticate the photo on original report only *******End of report****



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