



AFFILIATE CODE: F615001
CERTIFICATE NO.: MN2009/0080XM-2
BOSS NO.: 11854697

Testing Report for Submitted Sample

SGS Job No. / SGS : MN2009/0080XM
Declared Description : Artificial Quartz
Sample Remitted Date : May 12, 2009 / 2009
Testing Period : May 12 – June 10, 2009 / 2009

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This is to report that we, SGS-CSTC Standards Technical Services Co., Ltd Xiamen, at the request of Messrs. HRA Marmoles & Granitos USA, Inc, who submitted us samples declared description as above which were sent to our laboratory for testing, we quote the results as follows:

	Test Item	Test Method	Test Result
1	Abrasion resistance	EN 14157:2004	The length of the groove: 13.5mm
2	Color fastness	EN ISO 105B02:2002	Grade (B.S) 4 or above
3	Compressive strength (MPa)	EN 1926:2006	195
4	Apparent density (kg/m3)	EN 1936:2006	2340
5	Heat deflection temperature	ASTM D648-07	250 °C Remark: 1. Test condition: Width: 20.74mm, Depth: 13.27mm. Heating rate: 120°C/h. Load: 1.82MPa. 2. Exceed the maximum range of the equipment, can not be measured.
6	Flexural strength (MPa)	EN 12372:2006	30.4
7	Shore hardness	GB 9966.5-2001	65.1

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



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	Test Item	Test Method	Test Result		
8	Impact resistance	ISO 10545-5-1996	Mean value of coefficient of restitution / 0.71		
9	Coefficient of liner thermal expansion (10 ⁶ /°C)	ASTM D696-08	17.1		
10	Water absorption (%)	EN 13755:2008	0.02		
11	Slip resistance	EN 14231:2003	SRVdry: 50		
			SRVwet: 16		
12	Chemical resistance	EN 14617-10:2005	Chemical reagent	Test time	Test result
			0.5mol/L HCL solution	1h	No effect
				8h	No effect
			0.5mol/L NaOH Solution	1h	No effect
				8h	No effect
Remark: There are many granular crystals on the surface of the sample. So the specular gloss test is not applicable, visual inspection is instead of it.					
13	Limit of Radionuclides in Building materials	GB 6566-2001	Item	Result	Class A Requirement
			Internal Exposure index	0.046	≤10
			External Exposure index	0.046	≤1.3
			Remark	A Grade decorating material is not limited when producing, selling and using.	

This report reflects our findings for analyzing of the submitted sample only, and does not refer to any matters or evidence for any shipment. This report does not for I/C negotiation.

The information stated in this report (or certificate) is derived from the results of inspection or testing procedures carried out in accordance with the instructions of our Client and/or our assessment of such results on the basis of any technical standards, trade custom or practice or other circumstances which should in our professional opinion be taken into account.

*****END*****