

Test Report

No.: SHHG1411041823PL

Date: DEC. 16, 2014

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ZHONGDI ARCHITECTURE & ART SOLUTIONS CO. LTD
NO.49A, RUIJIN ROAD, LICANG DISTRICT, QINGDAO, 266043 CHINA

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

Sample Description : NVWAROCK@DUO KITCHEN SINK
SGS Ref. No : QDHG201404282
Manufacturer : ZHONGDI ARCHITECTURE & ART SOLUTIONS CO. LTD
Country of Origin : CHINA
Sample Receiving Date : NOV. 18, 2014
Testing Period : NOV. 18, 2014 TO DEC. 16, 2014
Test Performed : SELECTED TEST(S) AS REQUESTED BY APPLICANT
Test Requested : 1.EN 13310:2003 KITCHEN SINKS - FUNCTIONAL
REQUIREMENTS AND TEST METHODS
2.LOAD TEST FOR SINKS (REFER TO CSA B45.5-11/
IAPMO Z124-2011 CLAUSE 5.8.6)
Test Result(s) : FOR FURTHER DETAILS, PLEASE REFER TO THE
FOLLOWING PAGE(S)
Conclusion : THE SUBMITTED SAMPLE MET THE TEST
REQUIREMENT.

Signed for and on behalf of
SGS-CSTC Ltd.



Yomoro Gu
Supervisor

■ **General product information**

**Manufactured from ZHONGDI ARCHITECTURE & ART SOLUTIONS CO. LTD.
THE SAMPLE SUBMITTED WAS A KITCHEN SINK, MADE OF SOLID SURFACE AND
STAINLESS STEEL, WITH WASTE OUTLET AND OVERFLOW.**

Style No.: DUO

■ **Copy of marking plate and summary of test results (information/comments):**

	
ZHONGDI ARCHITECTURE & ART SOLUTIONS CO LTD 7 Qutangxia Road, 266002 Qingdao, China 14 Declaration of Performance: ZAS-EXP-A001 EN 13310:2003	
Intended use: Preparation of food, washing of dishes and discharge of domestic waste water Product type: Kitchen sink DUO Kitchen sink made of solid surface and stainless steel	
Cleanability:	Pass
Durability:	Pass
Dangerous substances:	Pass

CE marking on the product

■ **Summary of testing:**

The submitted sample was tested and found to comply with applicable requirements of EN 13310:2003.

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Test Conducted:

1. EN 13310:2003 Kitchen Sinks - Functional requirements and test methods

2. Load test for sinks (Refer to CSA B45.5-11/ IAPMO Z124-2011 Clause 5.8.6)

Sample size: 1 piece

Clause	Test Method/ Requirement	Result	Rating
1. EN 13310:2003			
4 Requirements			
4.1 General	The manufacturer shall supply instructions for installation, use and care. Conformity with applicable European Directives (89/109/EEC) shall be declared by the manufacturer in his instructions for use and care on materials intended to come into contact with foodstuffs.	The instruction was provided by manufacturer	Pass
4.2 Connecting Dimensions	The connecting dimensions shall meet the requirements specified in EN 695.	See Result 1 & 2 See Remark 1	Pass
4.3 Draining of Water	Use tap water colored to contrast. When tested in accordance with the standard, all surfaces of the kitchen sink shall be inclined towards the bowls and/or outlets to ensure the drainage of water. The requirement shall apply only to the bowl and draining area (if applicable). The requirement shall not apply to tap platforms.	/	Pass
4.4 Resistance to Dry Heat	The test is intended to determine the suitability of kitchen sink surfaces where contact with moderately hot cooking pots is to be expected. When tested, or alternatively at a temperature of 180°C in accordance with ISO 4211-3, the sink shall not show surface changes which influence its usage, e.g. cracks, crazing, through cracks, blistering. Experience has shown that kitchen sinks made of glazed ceramics and stainless steel comply with this requirement.	/	Pass

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Clause	Test Method/ Requirement	Result	Rating
4.5 Resistance to Temperature Changes	When tested, the sinks shall not show surface changes which influence its intended usage, e.g. cracks, de-lamination. Experience has shown that kitchen sinks made of glazed ceramics and stainless steel comply with the requirement.	/	Pass
4.6 Resistance Against Chemicals and Staining Agents	Kitchen sinks, when used as intended, shall be resistance to household chemicals, foodstuffs and cleaning agents. When tested, the kitchen sinks shall not show any permanent surface deterioration, such as stains or deterioration which is not removable with water or abrasive agents.	No permanent surface deterioration	Pass
4.7 Surface stability	<ul style="list-style-type: none"> ● Resistance to Scratching This requirement is applicable only to multi-layer kitchen sinks to ensure the stability of the top layer. When tested, any scratch shall not exceed 0.1 mm and/or the total depth of the top layer whichever is the least. Experience has shown that kitchen sinks made of glazed ceramics and stainless comply with this requirement.	/	N/A
	<ul style="list-style-type: none"> ● Resistance to Abrasion This requirement is applicable only to multi-layer kitchen sinks to ensure the stability of the top layer. When tested, after 750 cycles, the top layer of the test specimen shall not be abraded through. Experience has shown that kitchen sinks made of glazed ceramics and stainless comply with this requirement.	/	N/A
4.8 Load Stability	After apply a load of (150±1) kg for 1 h on the sink. When tested, the wall-hung sink shall not crack, fall down or show permanent distortion.	Not belong to wall-hung sink	N/A
4.9 Flow Rate of The Overflow	Every kitchen sink shall be protected against overflowing. When tested the flow rate of the overflow shall not be less than 0.20 l/s. NOTE: In kitchen sinks with two or more bowls, it is possible to have only one overflow if the overflow from one bowl is interconnected to the other. A non-closeable outlet can be used as an overflow.	Flow rate: 0.25 l/s	Pass
4.10 Durability	Kitchen sinks conforming to the requirements of 4.3 to 4.8 are deemed to be durable.	/	Pass
4.11 Dangerous substances	See annex ZA.	See Result 3	Pass
6 Marking	For CE marking, see annex ZA	CE label was provided	Pass

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Clause	Test Method/ Requirement	Result	Rating
2. Load test for sinks			
Load test for sinks	There shall be no cracks in the surface of the specimen when examined in accordance with Items (b) to (d) of Clause 5.4.1. The maximum residual deflection after removal of the load shall not exceed 0.254 mm (0.010 in).	No cracks in the surface of the specimen Residual deflection: 0.10 mm	Pass

Remark:

1. The suitable waste fitting and overflow's pipework were provided by client.
2. N/A = Not applicable

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Result 1: Connecting dimensions for waste holes (mm)

Designation	Symbols	Dimensions requirements :	Results (mm)
Diameter of waste outlet hole or punched grill	D ₂	52 ⁺³ ₋₂	/
		60 ⁺¹ ₋₀	/
		62 ⁺³ ₋₂	/
		90 ⁺³ ₋₂	91
Reference Diameter	D ₃ ^a	70 (D ₂ =60 and 52)	/
		85 (D ₂ =62 and 52)	/
		115 (D ₂ =90)	115
Distance between the reference diameter of the waste outlet and the underside of the waste outlet hole	h ₂	2 to 25	3
		45 to 65	/
Distance between the bottom of the bowl and the reference diameter of the waste outlet	e	≥2	4
Waste outlet hole-sealing surface for the upper side	S ₁ ^b	-	10
Waste outlet hole-sealing surface for the underside	S ₂	≥3	10
a D ₃ is a reference diameter from which e and h ₂ are measured (see external flange diameter E in EN 274-1). b S ₁ is intended to provide proper sealing between the waste outlet and waste outlet hole.			

Result 2: Dimensions for the overflow holes (mm)

Designation	Symbols	Value	Results: (mm)
Distance from the centre of the waste outlet to a vertical line drawn from the centre of the overflow hole	a	≤ 120	123
Distance from the horizontal drawn through the centre of the overflow hole and the underside of the waste outlet hole	H ₁	110 to 180	120
Depth of the overflow hole	H ₂	25 ⁺⁰ ₋₅	8
Width of the overflow hole	B ₁	53 ⁺⁰ ₋₅	56
Width of the clearance of the overflow hole	B ₂	≥58	77
Depth of the clearance of the overflow hole	H ₃	≥30	41
Distance between spill-over level of the kitchen sink and top of overflow hole	H ₄	≥15	31
Diameter of the overflow hole	D ₁	32 ⁺² ₋₁	/
Clearance in the area of overflow hole	D ₄	≥36	/
Distance between centre lines of waste outlet holes	X	≤ 400	/
Thickness of the material in the area of the overflow hole	S ₂	≤ 25	19

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Result 3: Dangerous substances

Test Part Description:

Specimen No.	SGS Sample ID	Description
SN1	SHA14-106126.001	White solid board

Entry 23 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 91/338/EEC)

Test Method: With reference to EN 1122: 2001, Method B, analysis was performed by ICP-OES.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	5	ND
Conclusion				PASS

Remarks:

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

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Sample Photo:

Front view



Side view



Top view



SGS authenticate the photo on original report only

End of Report

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