

#### **TESTING REPORT**

Testing Complete

Testing In Progress Rev. #\_

Mfg:N/ADrawing No.:N/APattern Name:Solid Color Glaze Stoneware MugsShape Description:11oz Ceramic MugsReceiving Date:2011/4/05

Dept: SGS Job No.: SHD230845 Qty. Submitted: 40PCS Testing Date: 2011/4/05-2011/4/12

The submitted samples comply with all requested testing requirements.

Engineering Release: John Donohoe / John Gephart

Comments :

Conclusion:

Presented on below table. For details, please refer to the following page(s).

Test Requested	Result/Observation	Test #
A.Extractable Lead & Cadmium in Ceramic –	CONFORMS	
Food Contact		
B.Extractable Lead & Cadmium in Ceramic –	CONFORMS	
Lip Rim	CONFORING	
C.Extractable Lead & Cadmium in Ceramic –	CONFORME	
Non Food Contact	CONFORMS	
D.Aged Extractable Lead & Cadmium in	CONFORMO	
Ceramic – Food Contact	CONFORMS	
E.Aged Extractable Lead & Cadmium in		
Ceramic – Lip Rim	CONFORMS	
F.Aged Extractable Lead & Cadmium in		
Ceramic – Non Food Contact	CONFORMS	
Signed for and on behalf of		

SGS-CSTC Ltd.

Jack Yao

Senior Engineer

(1) N/A = Not Applicable to testing requested.

(2) CONFORMS = Meet target value.

(3) NONCONFORMS = Does not meet target value.

(4) HOLD = Test is on hold as not enough samples.

(5) PROGRESS = Test in progress

(6) N/C = Not being conducted as no compatible.



# (a) Extractable Lead & Cadmium in Ceramic – Food Contact

Reference Standard	:	Modify California Proposition	65
		Standard Test Method for Lea	ad & Cadmium Extracted from Glazed Ceramic
		Surface by Atomic Absorption	Spectroscopy.
Acceptance Level	:	Flatware	Pb 0.226 mcg/ml, Cd 0.500 mcg/ml
		Small Hollowware V<1.1litre	Pb 0.1 mcg/ml, Cd 0.322 mcg/ml
		Cups & Mugs	Pb 0.1 mcg/ml, Cd 0.322 mcg/ml
		Large Hollowware V>1.1litre	Pb 0.1 mcg/ml, Cd 0.084 mcg/ml
		Pitcher	Pb 0.1 mcg/ml, Cd 0.084 mcg/ml
Sample Size	:	6 pcs	

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		Test	Result				
		Observation					
Sample <u>Food Contact</u> <u>Surface</u>	Depth(mm)	Diameter (mm)	Extract Volume (ml)	Lead (mcg/ml)	Cadmium (mcg/ml)		
1	88	80	310	<0.01	<0.01		
2	88	80	310	<0.01	<0.01		
3	88	80	310	<0.01	<0.01		
4	88	80	310	<0.01	<0.01		
5	88	80	310	<0.01	<0.01		
6	88	80	310	<0.01	<0.01		
			AVG	<0.01	<0.01		
			St Dev	<0.01	<0.01		
			AVG + 2* St Dev	<0.01	<0.01		

To be Cont'd...



### (b) Extractable Lead & Cadmium in Ceramic – Lip Rim

Reference Standard	:	ASTM C927 Lead & Cadmium	Extracted from the Lip & Rim Area of Glass
		Tumblers Externally Decorate	d With Ceramic Glass Enamels
		Standard Test Method for Lea	d & Cadmium Extracted from Glazed Ceramic
		Surface by Atomic Absorption	Spectroscopy.
Acceptance Level	:	Flatware	Pb 4.0 mcg/ml, Cd 0.4 mcg/ml
		Small Hollowware V<1.1litre	Pb 4.0 mcg/ml, Cd 0.4 mcg/ml
		Cups & Mugs	Pb 4.0 mcg/ml, Cd 0.4 mcg/ml
		Large Hollowware V>1.1litre	Pb 4.0 mcg/ml, Cd 0.4 mcg/ml
		Pitcher	Pb 4.0 mcg/ml, Cd 0.4 mcg/ml
Sample Size	:	6 pcs	

Test Result					
			Observation		
Sample	Depth(mm)	Diameter	Extract	Lead	Cadmium
Lip Rim		(mm)	Volume (ml)	(mcg/ml)	(mcg/ml)
1	88	80	200	<0.01	<0.01
2	88	80	200	<0.01	<0.01
3	88	80	200	<0.01	<0.01
4	88	80	200	<0.01	<0.01
5	88	80	200	<0.01	<0.01
6	88	80	200	<0.01	<0.01
			AVG	<0.01	<0.01
			St Dev	<0.01	<0.01
			AVG + 2* St Dev	<0.01	<0.01

### (c) Extractable Lead & Cadmium in Ceramic - Non Food Contact

Reference Standard	:	ASTM C738 Lead & Cadmium Extracted from Glazed Ceramic Surfaces		
		Standard Test Method for Lea	d & Cadmium Extracted from Glazed Ceramic	
		Surface by Atomic Absorption	Spectroscopy.	
Acceptance Level	:	Flatware	Pb 75 $\mu$ gm/cm <sup>2</sup> , Cd 7.5 $\mu$ gm/cm <sup>2</sup>	
		Small Hollowware V<1.1litre	Pb 75 μgm/cm², Cd 7.5 μgm/cm²	
		Cups & Mugs	Pb 75 $\mu$ gm/cm <sup>2</sup> , Cd 7.5 $\mu$ gm/cm <sup>2</sup>	
		Large Hollowware V>1.1litre	Pb 75 μgm/cm <sup>2</sup> , Cd 7.5 μgm/cm <sup>2</sup>	
		Pitcher	Pb 75 $\mu$ gm/cm <sup>2</sup> , Cd 7.5 $\mu$ gm/cm <sup>2</sup>	
Sample Size		6 pcs		

		Test	Result			
		Observation				
Sample	Depth(mm)	Diameter	Extract	Lead	Cadmium	
Non-Food	,	(mm)	Volume (ml)	(µgm/cm <sup>2</sup> )	(µgm/cm <sup>2</sup> )	
Contact Surface						
1	88	80	800	<0.01	<0.01	
2	88	80	800	<0.01	<0.01	
3	88	80	800	<0.01	<0.01	
4	88	80	800	<0.01	<0.01	
5	88	80	800	<0.01	<0.01	
6	88	80	800	<0.01	<0.01	
			AVG	<0.01	<0.01	
			St Dev	<0.01	<0.01	
			AVG + 2* St Dev	<0.01	<0.01	

To be Cont'd...



## (d) Aged Extractable Lead & Cadmium in Ceramic – Food Contact

Reference Standard	:	Modify California Proposition	65
		After place the samples at the	e detergent chamber with 65 degree C for 72 hours.
		Standard Test Method for Le	ad & Cadmium Extracted from Glazed Ceramic
		Surface by Atomic Absorption	n Spectroscopy.
Acceptance Level	:	Flatware	Pb 0.226 mcg/ml, Cd 0.500 mcg/ml
		Small Hollowware V<1.1litre	Pb 0.1 mcg/ml, Cd 0.322 mcg/ml
		Cups & Mugs	Pb 0.1 mcg/ml, Cd 0.322 mcg/ml
		Large Hollowware V>1.1litre	Pb 0.1 mcg/ml, Cd 0.084 mcg/ml
		Pitcher	Pb 0.1 mcg/ml, Cd 0.084 mcg/ml
Sample Size		6 pcs	<b>5 6</b>

	•	Test	Result		
			Observation		
Sample	Depth(mm)	Diameter	Extract	Lead	Cadmium
Food Contact		(mm)	Volume (ml)	(mcg/ml)	(mcg/ml)
<u>Surface</u>					
1	88	80	200	<0.01	<0.01
2	88	80	200	<0.01	<0.01
3	88	80	200	<0.01	<0.01
4	88	80	200	<0.01	<0.01
5	88	80	200	<0.01	<0.01
6	88	80	200	<0.01	<0.01
			AVG	<0.01	<0.01
			St Dev	<0.01	<0.01
			AVG + 2* St Dev	<0.01	<0.01

#### (e) Aged Extractable Lead & Cadmium in Ceramic – Lip Rim

Reference Standard	:	Modify ASTM C927 Lead & C	admium Extracted from the Lip & Rim Area of Glass		
		Tumblers Externally Decorated With Ceramic Glass Enamels			
		After place the samples at the	e detergent chamber with 65 degree C for 24 hours.		
		Standard Test Method for Lead & Cadmium Extracted from Glazed Ceramic			
		Surface by Atomic Absorption	Spectroscopy.		
Acceptance Level	:	Flatware	Pb 4.0 mcg/ml, Cd 0.40 mcg/ml		
		Small Hollowware V<1.1litre	Pb 4.0 mcg/ml, Cd 0.40 mcg/ml		
		Cups & Mugs	Pb 4.0 mcg/ml, Cd 0.40 mcg/ml		
		Large Hollowware V>1.1litre	Pb 4.0 mcg/ml, Cd 0.40 mcg/ml		
		Pitcher	Pb 4.0 mcg/ml, Cd 0.40 mcg/ml		
Sample Size	:	6 pcs			

		Test	Result		
			Observation		
Sample	Depth(mm)	Diameter	Extract	Lead	Cadmium
Lip Rim		(mm)	Volume (ml)	(mcg/ml)	(mcg/ml)
1	88	80	200	<0.01	<0.01
2	88	80	200	<0.01	<0.01
3	88	80	200	<0.01	<0.01
4	88	80	200	<0.01	<0.01
5	88	80	200	<0.01	<0.01
6	88	80	200	<0.01	<0.01
			AVG	<0.01	<0.01
			St Dev	<0.01	<0.01
			AVG + 2* St Dev	<0.01	<0.01

(f) Aged Extractable Lead & Cadmium in Ceramic – Non Food Contact

To be Cont'd...

SGS	
Reference Standard	: Modify ASTM C738 Lead & Cadmium Extracted from Glazed Ceramic Surfaces After place the samples at the detergent chamber with 65 degree C for 24 hours. Standard Test Method for Lead & Cadmium Extracted from Glazed Ceramic
Acceptance Level	$\begin{array}{llllllllllllllllllllllllllllllllllll$
Sample Size	: 6 pcs
	Test Result

Test Result					
	Observation				
Sample	Depth(mm)	Diameter	Extract	Lead	Cadmium
Food Contact		(mm)	Volume (ml)	(µgm/cm²)	(µgm/cm <sup>2</sup> )
<u>Surface</u>					
1	88	80	800	<0.01	<0.01
2	88	80	800	0.02	<0.01
3	88	80	800	<0.01	<0.01
4	88	80	800	<0.01	<0.01
5	88	80	800	<0.01	<0.01
6	88	80	800	<0.01	<0.01
			AVG	<0.01	<0.01
St Dev				<0.01	<0.01
			AVG + 2* St Dev	<0.01	<0.01

\*\*\* End of Report \*\*\*