

No.: GZHG1405016075CW

BESTSUB TECHNOLOGIES CO LTD RM810 EXCHANGE SQUARE, NO268 DONGFENG ZHONG ROAD, YUEXIU DISTRICT, GUANGZHOU 510030 CHINA

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

: SUBLIMATION POLYMER TRAVEL MUG
: BPM02
: Selected test(s) as requested by applicant
: May 08, 2014
: May 08, 2014 to May 21, 2014
:

Test Requested	Result
EN 12875-4:2006	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments-Overall migration	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments–Sensorial examination odour and taste test	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments–Specific Migration of Heavy Metal	PASS

Signed for and on behalf of SGS-CSTC Ltd.

Jason Cheung Approved Signatory



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Date: May 22, 2014

- I. Physical Test
- 1. Test conducted:

EN 12875-4: 2006 Mechanical dishwashing resistance of utensils — Part 4: Rapid test for domestic ceramic articles

2. Scope: This European Standard specifies a rapid method for testing the dishwashing resistance of ceramic articles intended for domestic use. It does not define the number of dishwashing cycles that any given product should withstand.

Test sample description :	Plastic Mug
Number of Tested Sample(s):	4 Pieces

3. Test Procedure:

With reference to EN 12875-4: 2006 Test method

4. Test Result as follows:

4.1 After 16hours:

	Articles with or without decoration (Category of articles)	Test specimen number	Color	Gloss	Clouding	Resistant deposits and iridescent layers	Other aspects
		1#	0	0	0	0	0
loopootor 1	Plastic	2#	0	0	0	0	0
Inspector 1	articles	3#	0	0	0	0	0
		4#	0	0	0	0	0
	Average		0	0	0	0	0
		1#	0	0	0	0	0
have a low O	Plastic	2#	0	0	0	0	0
Inspector 2	articles	3#	0	0	0	0	0
	-	4#	0	0	0	0	0
Average		0	0	0	0	0	
	Overall rating		0	0	0	0	0



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4.2 After 32hours:

	Articles with or without decoration (Category of articles)	Test specimen number	Color	Gloss	Clouding	Resistant deposits and iridescent layers	Other aspects
		1#	0	0	0	0	0
la su sata a d	Plastic	2#	0	0	0	0	0
Inspector 1	articles	3#	0	0	0	0	0
		4#	0	0	0	0	0
	Average		0	0	0	0	0
		1#	0	0	0	0	0
la su s star O	Plastic	2#	0	0	0	0	0
Inspector 2	articles	3#	0	0	0	0	0
		4#	0	0	0	0	0
	Average		0	0	0	0	0
	Overall rating		0	0	0	0	0

Note:

Classification	Rating
0	No visible change
1	First discernible change
2	Clearly visible change

Sample Photo(s):





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II. SGS Ref No.: CANHG1407001201

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description	Material
			(claimed by the client)
SN1	CAN14-070012.001	White plastic mug	plastic

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments- Overall migration

- Test Requested : As specified by client, to determine Overall migration from plastic used in contact with food for compliance with Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments.
- Test Method : With reference to EN1186-1:2002 for selection of conditions and test method; or EN1186-9:2002 aqueous food simulants by article filling method. or EN 1186-14:2002 substitute test.

Simulant Used	<u>Time</u>	<u>Temperature</u>	Max. Permissible Limit	Result of 001 Overall Migration	<u>Comment</u>
Distilled Water	2.0hr(s)	70 °C	10mg/dm ²	<3.0mg/dm ²	PASS
3% Acetic Acid (W/V) Aqueous Solution	2.0hr(s)	70 ℃	10mg/dm ²	<3.0mg/dm ²	PASS
50% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70 ℃	10mg/dm ²	<3.0mg/dm ²	PASS
95% Ethanol (V/V) Aqueous Solution (Rectified Olive Oil Substitute)	2.0hr(s)	60 ℃	10mg/dm ²	<3.0mg/dm ²	PASS
Isooctane (Rectified Olive Oil Substitute)	0.5hr(s)	40 ℃	10mg/dm ²	<3.0mg/dm ²	PASS

Notes :

1. mg/dm² =milligram per square decimeter

2. $^{\circ}$ C = degree Celsius

3. Permissible Limit is according to Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments.

4. The test data is obtained by considering the articles intended for repeated use as per described in Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex V. Report the 3rd extractive result.



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German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments-Sensorial examination odour and taste test

- Test Requested : As specified by client, to determine Sensorial examination odour and taste from the submitted sample used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments.
- Test Method : With reference to DIN10955:2004. Test condition: 70°C 2.0hr(s); Test media: Distilled water; No.of panelist: 6

<u>Test Item(s)</u>	<u>Limit</u>	<u>001</u>
Sensorial examination odour (Point scale)	2.5	1.0
Sensorial examination taste (Point scale)	2.5	1.0
Comment		PASS

Notes :

Scale evaluation:

- 0: No perceptible odour
- 1: Odour just perceptible (still difficult to define)
- 2: Moderate odour
- 3: Moderately strong odour
- 4: Strong odour

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments-Specific Migration of Heavy Metal

- Test Requested : As specified by client, to determine Specific Migration of Heavy Metal from plastic used in contact with food for compliance with Commission Regulation (EU) No 10/2011 of 14 January 2011with amendments.
- Test Method : With reference to EN13130-1:2004 for selection of test method, analysis was performed by ICP-OES.

Sample 001

Simulant Used :	3% Acetic Acid (W/V) Aqueous Solution
Test Condition :	70℃ 2.0hr(s)

<u>Test Item(s)</u>	Max. Permissible	<u>Unit</u>	<u>MDL</u>	Test result
	<u>Limit</u>			
Extractable Barium	1	mg/kg	0.25	ND
Extractable Cobalt	0.05	mg/kg	0.01	ND





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Extractable Copper	5	mg/kg	0.25	ND	
Extractable Iron	48	mg/kg	0.25	0.68	
Extractable Lithium	0.6	mg/kg	0.5	ND	
Extractable Manganese	0.6	mg/kg	0.25	ND	
Extractable Zinc	25	mg/kg	0.5	ND	
Comment				PASS	

Notes :

- 1. mg/kg = milligram per kilogram of foodstuff in contact with
- 2. °C = degree Celsius
- 3. MDL=Method Detection Limit
- 4. ND= Not Detected(less than MDL)

5. Permissible Limit is according to Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments.

6. The test data is obtained by considering the articles intended for repeated use as per described in Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex V. Report the 3rd extractive result.

Sample photo:



CAN14-070012.001

End of Report



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