

Test Report No. 70.431.17.12603.01



Dated 2017-08-04

ORIGINAL

Applicant: [REDACTED]
Address: RM822, NO. 255 TIANGAO LANE, HUAYUE INTL MANSION YINZHOU DISTRICT, NINGBO 315199, CHINA
Product Name: Universal Spray Sports Bottle
Order No.: 2017GJL06ES0002, 2017GJL07ES0001
Style No.: ES/GJL572583, S-121L, D1000-011
Buyer: [REDACTED]
Buyer Address: [REDACTED]
Country of Origin: China
Receipt Date of Sample: 2017-07-24
Date of Testing: 2017-07-24 to 2017-08-03
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages
Conclusion: When test as specified, the test parameters of the submitted sample(s) were found to comply with the respective requirements as stated in Regulation (EU) No.10/2011 with amendments, Council of Europe Resolution AP (2004) 5 and Regulation (EC) No 1935/2004 of the European Parliament.

TÜV SÜD Certification and Testing (China) Co.,Ltd.
Shanghai Branch

Prepared by:

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Note: (1) General Terms & Conditions as mentioned overleaf; (2) The results relate only to the items tested; (3) The test report shall not be reproduced except in full without the written approval of the laboratory.

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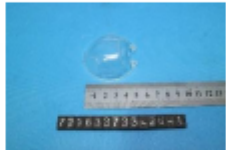
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Description of the test subject:

Sample	Description	Photo
A	Universal Spray Sports Bottle	
001	Transparent plastic cap (PC)	
002	Transparent plastic straw (PP)	
003	Green plastic lid (PP)	
004	Green plastic bottle (PE)	
005	Translucent silicone rubber ring	

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Sample	Description	Photo
006	Green silicone rubber nozzle	
Reference samples		



Test Result(s):

1. Overall Migration Test

- with reference to EN 1186: Part 1, Part 3 & Part 9
- Sample 001 migration ratio: 167ml/1.67dm²
- Sample 002 migration ratio: 104ml/1.04dm²
- Sample 003 migration ratio: 169ml/1.69dm²
- Sample 004 migration ratio: 560ml/4.61dm²
- Sample 005 migration ratio: 110ml/1.10dm²
- Sample 006 migration ratio: 114ml/1.14dm²

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		001		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		002		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		003		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		004		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		005		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

Simulant(s) Used	Test Condition	Overall Migration Result(s)* [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]	Conclusion
		006		
10% Ethanol	70°C for 2 hours	<3.0	10	Pass

- Note:
1. mg/dm² denotes milligram per square decimeter
 2. < denotes less than
 3. Test condition and simulant(s) were specified by client.
 4. * denotes the data comes from the third extraction solution

2. Specific migration of Bisphenol A

- With reference to EN 13130-13, followed by LC/MS/MS
- Test condition: 10% Ethanol, 70°C for 2 hours
- Sample 001 migration ratio: 167ml/1.67dm²

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
	001			
Specific migration of BPA	<0.01	0.01	0.6	Pass

- Note:
1. mg/kg denotes milligram per kilogram foodstuff
 2. < denotes less than
 3. Test condition and simulant(s) were specified by client.

3. Specific Migration of Primary Aromatic Amine

- With reference to EN 13130-1:2004, followed by Kunststoffe im Lebensmittelverkehr, Book 2, Teil B II, XXI
- Test condition: 10% Ethanol, 70°C for 2 hours
- Sample 003 migration ratio: 169ml/1.69dm²
- Sample 004 migration ratio: 560ml/4.61dm²

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
	003		
Primary Aromatic Amine	<0.01	0.01	Pass



Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
	004		
Primary Aromatic Amine	<0.01	0.01	Pass

Note: 1. mg/kg denotes milligram per kilogram foodstuff
 2. < denotes less than
 3. Detection limit is 0.01 mg/kg
 4. Test condition and simulant(s) were specified by client.

4. Specific Migration of Heavy Metals

- With reference to EN 13130-1:2004, followed by ICP-MS
- Test condition: 10% Ethanol, 70°C for 2 hours
- Sample 001 migration ratio: 167ml/1.67dm²
- Sample 002 migration ratio: 104ml/1.04dm²
- Sample 003 migration ratio: 169ml/1.69dm²
- Sample 004 migration ratio: 560ml/4.61dm²

Test Item(s)	Result(s) [mg/kg]	Limit [mg/kg]	Conclusion
	001		
Aluminium	<0.1	1	Pass
Barium	<0.1	1	Pass
Cobalt	<0.05	0.05	Pass
Copper	<0.5	5	Pass
Iron	<1.0	48	Pass
Lithium	<0.1	0.6	Pass
Manganese	<0.05	0.6	Pass
Zinc	<1.0	5	Pass
Nickel	<0.002	0.02	Pass

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Test Item(s)	Result(s) [mg/kg]	Limit [mg/kg]	Conclusion
	002		
Aluminium	<0.1	1	Pass
Barium	<0.1	1	Pass
Cobalt	<0.05	0.05	Pass
Copper	<0.5	5	Pass
Iron	<1.0	48	Pass
Lithium	<0.1	0.6	Pass
Manganese	<0.05	0.6	Pass
Zinc	<1.0	5	Pass
Nickel	<0.002	0.02	Pass

Test Item(s)	Result(s) [mg/kg]	Limit [mg/kg]	Conclusion
	003		
Aluminium	<0.1	1	Pass
Barium	<0.1	1	Pass
Cobalt	<0.05	0.05	Pass
Copper	<0.5	5	Pass
Iron	<1.0	48	Pass
Lithium	<0.1	0.6	Pass
Manganese	<0.05	0.6	Pass
Zinc	<1.0	5	Pass
Nickel	<0.002	0.02	Pass



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Test Item(s)	Result(s) [mg/kg]	Limit [mg/kg]	Conclusion
	004		
Aluminium	<0.1	1	Pass
Barium	<0.1	1	Pass
Cobalt	<0.05	0.05	Pass
Copper	<0.5	5	Pass
Iron	<1.0	48	Pass
Lithium	<0.1	0.6	Pass
Manganese	<0.05	0.6	Pass
Zinc	<1.0	5	Pass
Nickel	<0.002	0.02	Pass

- Note:
1. mg/kg denotes milligram per kilogram foodstuff
 2. < denotes less than
 3. Test condition and simulant(s) were specified by client.

-End of Test Report-