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## Test Report No.: 244461040f 001

XIAMEN MODERN DELTA LTD. **Client:** Jinxing Road No.61-69, Hubin North Road, Xiamen 361012, P.R.China Spill-proof Durable Tritan Spout Bottle, Test item(s): Spill-proof Durable Tritan Straw Bottle Identification / Model No(s): ED-106 / ED-107 Sample obtaining method: Sending by customer Condition at delivery: Test item complete and undamaged. 2022-11-02 & 2023-07-03 Sample Receiving date: **Testing Period:** 2022-11-16 to 2022-11-30 Place of testing: Chemical laboratory Shanghai, Toys laborator Test conclusion: **Test specification:** ion Performed parameter(s) for the compliance with the following regulations concerning PASS materials in contact with foodstuff: Regulation (EC) No 1935/2004 PASS Volatile compounds content N-Nitrosamines and N-Nitrosatables substances release PASS Formaldehyde release PASS **Color Fastness** PASS EN 14350:2020 Child care articles - Drinking equipment - Safety requirements and PASS test methods -Mechanical requirements and tests EN 14350:2020 Child care articles - Drinking equipment - Safety requirements and PASS test methods -Clause 8.6 Migration of certain elements Other Information: Country of Origin: China Report Reference No: 244461040a 001 & 244461040d 001 For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.

2023-07-21	Amy Zhao / Technical Manager	Neo Yang / Assistant Manager
Date	Name	Position
Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed		

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

"Decision Rule" document announced in our website (https://www.tuv.com/landingpage/en/qm-gcn/) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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Indication:	Food contact
Product:	Commodity, contact with foodstuff

### **Description of test specimen**

ltem	
6	Spill-proof Durable Tritan Spout Bottle
6-1	Spill-proof Durable Tritan Straw Bottle

### 1. Material List:

Sample No.	Material	Color	Location	Refer
6	Whole Product	Multicolor	Spill-proof Durable Tritan Spout Bottle	
6-1	Whole Product	Multicolor	Spill-proof Durable Tritan Straw Bottle	
6A	Plastic, Tritan	Transparent purple	Body	
6B	Plastic, Tritan	Transparent green	Body	
6C	Plastic, Tritan	Transparent orange	Body	
6D	Plastic, PP	Grey	Screw Cap	244461040a 001 1B
6E	Silicone	Translucent	Seal ring & straw	244461040d 001 4D
6F	Plastic	Purple	Top lid	
6G	Plastic	Red	Top lid	
6H	Plastic	Dk. blue	Top lid	
61	Plastic	Dk. purple	Gasket & buckle	
6J	Plastic	Green	Gasket & buckle	
6K	Plastic	Red	Gasket & buckle	
6L	Plastic, Tritan	Transparent	Body	244461040a 001 1A

#### Remark:

According to client's information 6D and 6L are produced of same material of 244461040a 001 1B and 1A individually. Tests were performed on randomly selected items.

According to client's information 6E is produced of same material of 244461040d 001 4D. Tests were performed on randomly selected items.

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2.	<b>Overall Results:</b>	

Test No.	Tested Item	Conclusion
1	Sensorial examination	Pass
2	Global Migration	Pass
3	Global Migration from Silicone	Pass
4	Colourfastness	Pass
5	Specific Migration of Metals	Pass
6	Specific Migration of 2,2,4,4-tetramethylcyclobutane-1,3-diol	Pass
7	Volatile compounds content	Pass
8	N-Nitrosamines and N-Nitrosatables substances release	Pass
9	Formaldehyde release	Pass
10	Color Fastness	Pass
11	EN 14350:2020 Child care articles – Drinking equipment - Safety requirements and test methods - Mechanical requirements and tests	Pass
12	EN 14350:2020 Child care articles - Drinking equipment - Safety requirements and test methods - Clause 8.6 Migration of certain elements	Pass



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3. Results

#### 3.1 Sensorial examination

Test method: It is examined to the extent of food simulant being used, which comes into contact with the product, undergoes detectable changes in taste and smell.

For this purpose, the food simulant was stored in the product under the below mentioned time and temperature. Afterwards, the food simulant was examined by an appropriate number of tasters with regard to any divergence in smell and taste. Another test sample, which was used as a reference, was treated by the same way except that it had no contact with the product to be tested.

Before testing, the product had been cleaned according to the product's instruction manual or in the absence of such manual, by normal household cleaning.

The test is carried out on the basis of ISO 13302 by paired comparison test:

Evaluation	0 =	No discernible deviation
scheme:	1 =	Barely discernible deviation
	2 =	Weak deviation
	3 =	Clear deviation
	4 =	Strong deviation
	Limit:	3 (failed)

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Water	2 hour(s) / 70 °C

Test No.:	1
Sample No.:	6A
Parameter:	Result
Transfer of Smell:	0
Transfer of Taste:	0

Test No.:	2
Sample No.:	6B
Parameter:	Result
Transfer of Smell:	0
Transfer of Taste:	0



Parameter:

Transfer of Smell:

Transfer of Taste:

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Test No.:	3
Sample No.:	6C
Parameter:	Result
Transfer of Smell:	0
Transfer of Taste:	0
Test No.:	4^
Sample No.:	6D
Parameter:	Result
Transfer of Smell:	0
Transfer of Taste:	0
Test No.:	5^^
Sample No.:	6E
Parameter:	Result
Transfer of Smell:	0
Transfer of Taste:	0
Test No.:	6^
Sample No.:	6L

Result

0

0

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### 3.2 Global Migration

Test method: The migratory behaviour is examined with reference to Commission Regulation (EU) No 10/2011 and its amendments.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C
Ethanol 50 %	2 hour(s) / 70 °C

Test No.:	1							
Sample No.:		6A						
Migration ratio:		380 ml / 2.8 dm <sup>2</sup>						
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit		
Acetic acid 3 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		
Ethanol 50 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		

Test No.:		2						
Sample No.:		6B						
Migration ratio:		380 ml / 2.8 dm <sup>2</sup>						
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit		
Acetic acid 3 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		
Ethanol 50 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		

Test No.:		3						
Sample No.:		6C						
Migration ratio:		380 ml / 2.8 dm <sup>2</sup>						
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit		
Acetic acid 3 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		
Ethanol 50 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		



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Test No.:	4^							
Sample No.:		6D						
Migration ratio:		1000 ml / 6 dm <sup>2</sup>						
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit		
Acetic acid 3 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		
Ethanol 50 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		

Test No.:		5^						
Sample No.:		6L						
Migration ratio:		160 ml / 1.8 dm <sup>2</sup>						
Parameter	Unit	Unit RL Migration Migration Aigration Limit Result Result						
Acetic acid 3 %	mg/dm <sup>2</sup>	2	<rl< td=""><td><rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>10</td></rl<></td></rl<>	<rl< td=""><td>10</td></rl<>	10		
Ethanol 50 %	mg/dm <sup>2</sup>							

Abbreviations:

RL = Reporting Limit

 $mg/dm^2$  = Milligram per square decimetre

- ml/dm<sup>2</sup> = Mililitre per square decimetre
  - < = Less than

#### Remark:

- \*1 Stability test is included in this test parameter.
- \*2 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.



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### 3.3 Global Migration from Silicone

- Test method: The migratory behaviour is examined with reference to Chapter V, Article 18 of Commission regulation 10/2011 and its amendments. Deviating to the regulations the following tests were performed as orientating single tests.
- Limit: Resolution AP (2004) 5 on silicones used for food contact applications

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) <b>/</b> 70 °C
Ethanol 50 %	2 hour(s) / 70 °C

Test No.:	1^^						
Sample No.:	6E						
Parameter	Unit Result Limit						
Acetic acid 3 %	mg/dm <sup>2</sup>	5	10				
Ethanol 50 %	mg/dm <sup>2</sup>	4	10				

Abbreviations:

mg/dm<sup>2</sup> = Milligram per square decimetre

< = Less than



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### 3.4 Colourfastness

Test method: Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food, Appendix III

Limit: Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food - *No transfer of colorants to foodstuffs is permitted* 

Test No.:	1	2
Sample No.:	6A	6B
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
Water	No	No
Acetic acid 3 %	No	No
Ethanol 50 %	No	No

Test No.:	3	4^
Sample No.:	6C	6D
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
Water	No	No
Acetic acid 3 %	No	No
Ethanol 50 %	No	No



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### 3.5 Specific Migration of Metals

Test method: The migratory behaviour was examined with reference to Commission Regulation (EU) No. 10/2011 and its amendments. Determination by ICP-MS.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C

Test No.:	1							
Material No.:				6A				
Migration ratio:			380	ml / 2.8 dm <sup>2</sup>				
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit		
Aluminium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1		
Antimony	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<>	<rl< td=""><td>0.04</td></rl<>	0.04		
Arsenic	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.		
Barium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1		
Cadmium	mg/kg	0.002	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.		
Total Chromium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.		
Cobalt	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05		
Copper	mg/kg	0.5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5		
Iron	mg/kg	5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<>	<rl< td=""><td>48</td></rl<>	48		
Lead	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.		
Lithium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6		
Manganese	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6		
Mercury	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.		
Nickel	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<>	<rl< td=""><td>0.02</td></rl<>	0.02		
Zinc	mg/kg	1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5		
Europium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>			
Gadolinium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>			
Lanthanum	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>			
Terbium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>			
Sum of Lanthanide substances	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05		

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Test No.:		2							
Material No.:		6B							
Migration ratio:			380	ml / 2.8 dm <sup>2</sup>					
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit			
Aluminium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1			
Antimony	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<>	<rl< td=""><td>0.04</td></rl<>	0.04			
Arsenic	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Barium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1			
Cadmium	mg/kg	0.002	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Total Chromium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Cobalt	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05			
Copper	mg/kg	0.5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5			
Iron	mg/kg	5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<>	<rl< td=""><td>48</td></rl<>	48			
Lead	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Lithium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6			
Manganese	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6			
Mercury	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Nickel	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<>	<rl< td=""><td>0.02</td></rl<>	0.02			
Zinc	mg/kg	1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5			
Europium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>				
Gadolinium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>				
Lanthanum	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>				
Terbium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>				
Sum of Lanthanide substances	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05			

Test No.:	3								
Material No .:				6C					
Migration ratio:			380	ml / 2.8 dm <sup>2</sup>					
Parameter	Unit	Unit RL 1 <sup>st</sup> Migration 2 <sup>nd</sup> Migration 3 <sup>rd</sup> Migration Limit							
Aluminium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1			
Antimony	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<>	<rl< td=""><td>0.04</td></rl<>	0.04			
Arsenic	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			
Barium	mg/kg	mg/kg 0.1 <rl 1<="" <rl="" td=""></rl>							
Cadmium	mg/kg	0.002	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.			

TÜV Rheinland (Shanghai) Co., Ltd. Shanghai TÜV Rheinland Building, No. 177, Lane 777, West Guangzhong Road, Jing'an District, Shanghai 200072, P.R. China

Tel.: +86 21 6108 1188 Fax: +86 21 6108 1099 Mail: info@shg.chn.tuv.com Web: www.tuv.com



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Total Chromium	mg/kg	0.01	<rl< th=""><th><rl< th=""><th><rl< th=""><th>n.d.</th></rl<></th></rl<></th></rl<>	<rl< th=""><th><rl< th=""><th>n.d.</th></rl<></th></rl<>	<rl< th=""><th>n.d.</th></rl<>	n.d.
Cobalt	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05
Copper	mg/kg	0.5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5
Iron	mg/kg	5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<>	<rl< td=""><td>48</td></rl<>	48
Lead	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.
Lithium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6
Manganese	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6
Mercury	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.
Nickel	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<>	<rl< td=""><td>0.02</td></rl<>	0.02
Zinc	mg/kg	1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5
Europium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Gadolinium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Lanthanum	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Terbium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Sum of Lanthanide substances	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05

Test No.:		4^									
Material No .:		6D									
Migration ratio:			100	0 ml / 6 dm <sup>2</sup>							
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit					
Aluminium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1					
Antimony	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<>	<rl< td=""><td>0.04</td></rl<>	0.04					
Arsenic	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.					
Barium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1					
Cadmium	mg/kg	0.002	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.					
Total Chromium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.					
Cobalt	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05					
Copper	mg/kg	0.5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5					
Iron	mg/kg	5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<>	<rl< td=""><td>48</td></rl<>	48					
Lead	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.					
Lithium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6					
Manganese	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6					
Mercury	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.					
Nickel	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<>	<rl< td=""><td>0.02</td></rl<>	0.02					
Zinc	mg/kg	1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5					

TÜV Rheinland (Shanghai) Co., Ltd. Shanghai TÜV Rheinland Building, No. 177, Lane 777, West Guangzhong Road, Jing'an District, Shanghai 200072, P.R. China

Tel.: +86 21 6108 1188 Fax: +86 21 6108 1099



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Europium	mg/kg	0.01	<rl< th=""><th><rl< th=""><th><rl< th=""><th></th></rl<></th></rl<></th></rl<>	<rl< th=""><th><rl< th=""><th></th></rl<></th></rl<>	<rl< th=""><th></th></rl<>	
Gadolinium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Lanthanum	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Terbium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
Sum of Lanthanide substances	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05

Test No.:				5^						
Material No.:		6L								
Migration ratio:			160	ml / 1.8 dm <sup>2</sup>						
Parameter	Unit	RL	1 <sup>st</sup> Migration Result	2 <sup>nd</sup> Migration Result	3 <sup>rd</sup> Migration Result	Limit				
Aluminium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1				
Antimony	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.04</td></rl<></td></rl<>	<rl< td=""><td>0.04</td></rl<>	0.04				
Arsenic	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.				
Barium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>1</td></rl<></td></rl<>	<rl< td=""><td>1</td></rl<>	1				
Cadmium	mg/kg	0.002	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.				
Total Chromium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.				
Cobalt	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05				
Copper	mg/kg	0.5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5				
Iron	mg/kg	5	<rl< td=""><td><rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>48</td></rl<></td></rl<>	<rl< td=""><td>48</td></rl<>	48				
Lead	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.				
Lithium	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6				
Manganese	mg/kg	0.1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.6</td></rl<></td></rl<>	<rl< td=""><td>0.6</td></rl<>	0.6				
Mercury	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>n.d.</td></rl<></td></rl<>	<rl< td=""><td>n.d.</td></rl<>	n.d.				
Nickel	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.02</td></rl<></td></rl<>	<rl< td=""><td>0.02</td></rl<>	0.02				
Zinc	mg/kg	1	<rl< td=""><td><rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>5</td></rl<></td></rl<>	<rl< td=""><td>5</td></rl<>	5				
Europium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>					
Gadolinium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>					
Lanthanum	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>					
Terbium	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>					
Sum of Lanthanide substances	mg/kg	0.01	<rl< td=""><td><rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>0.05</td></rl<></td></rl<>	<rl< td=""><td>0.05</td></rl<>	0.05				

Abbreviations:

RL = Reporting limit

n.d. = Not detected



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- mg/kg = Milligram per kilogram
- ml/dm<sup>2</sup> = Mililitre per square decimetre
  - < = Less than

Remark:

- \*1 Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all lanthanide substances europium, gadolinium, lanthanum and terbium were not detected, the result is stated n.d.
- \*2 Stability test is included in this test parameter.
- \*3 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.



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### 3.6 Specific Migration of 2,2,4,4-tetramethylcyclobutane-1,3-diol (#)

Test method: The migratory behavior was examined with reference to Commission Regulation (EU) No. 10/2011 and its amendments. Determination by GC-MS.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Ethanol 50 %	2 hour(s) / 70 °C

Test No.:		1					
Sample No.:		6A					
Migration ratio:			44	0 ml / 3.09 dn	1 <sup>2</sup>		
Parameter	CAS No.	CAS No. Unit RL Migration Migration Aigration Limit Result Result					
2,2,4,4-tetramethyl cyclobutane-1,3-diol	3010-96-6 mg/kg 1 <rl 5<="" <rl="" td=""></rl>						

Test No.:		2						
Sample No.:		6B						
Migration ratio:			44	10 ml / 3.09 dn	1 <sup>2</sup>			
Parameter	CAS No.	CAS No.UnitRL1st Migration2nd Migration3rd MigrationLimitResultResultResultResultResultResult						
2,2,4,4-tetramethyl cyclobutane-1,3-diol	3010-96-6 mg/kg 1 <rl 5<="" <rl="" td=""></rl>							

Test No.:	3						
Sample No.:		6C					
Migration ratio:			44	0 ml / 3.09 dm	1 <sup>2</sup>		
Parameter	CAS No.	CAS No. Unit RL Migration Migration Limit Result Result					
2,2,4,4-tetramethyl cyclobutane-1,3-diol	3010-96-6 mg/kg 1 <rl 5<="" <rl="" td=""></rl>						



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Test No.:		4^							
Sample No.:		6L							
Migration ratio:			22	20 ml / 1.93 dn	1 <sup>2</sup>				
Parameter	CAS No.	CAS No.UnitRL1st Migration2nd Migration3rd MigrationCAS No.UnitRLMigration ResultMigration ResultLimit Result							
2,2,4,4-tetramethyl cyclobutane-1,3-diol	3010-96-6	3010-96-6 mg/kg 1 <rl 5<="" <rl="" td=""></rl>							

Abbreviations:

- RL = Reporting Limit
- mg/kg = Milligram per kilogramm
- ml/dm<sup>2</sup> = Mililitre per square decimetre
  - < = Less than

#### Remark :

- \*1 Stability test is included in this test parameter.
- \*2 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.
- (#) Test sub-contracted to a laboratory which complies with the requirement of ISO/IEC 17025:2017.



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### 3.7 Volatile compounds content

Test Method: EN 14350:2020 Clause 8.4

#### **Test result:**

Test No.:	1^^				
Material No.:	6E				
Parameter	Unit RL Result Limit				
Volatile compounds content#	% 0.1 0.18 0.5				

Abbreviation:	<	= Less than
	RL	= Reporting Limit

% = percent

#### Remark:

#

Results for volatile compounds content have been adjusted with analytical tolerances of 0.3% if the condition stated in EN 14350:2020 clause 8.4 is fulfilled.



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### 3.8 N-Nitrosamines and N-Nitrosatables substances release

Test method: EN 14350:2020 Clause 8.5; with reference to EN 12868:2017

#### **Test result:**

Test No.			1^^						
Material No.				6E					
			Migr	Migratable N-Nitrosamines			Migratable N-Nitrosatable Substances		
Test Parameter	CAS No.	Unit	RL	Requirement	Test result	RL	Requirement	Test result	
NDMA	62-75-9	mg/kg	0.001		< RL	0.001		< RL	
NDEA	55-18-5	mg/kg	0.001		< RL	0.001		< RL	
NDPA	621-64-7	mg/kg	0.001		< RL	0.001		< RL	
NDiBA	997-95-5	mg/kg	0.001		< RL	0.001		< RL	
NDBA	924-16-3	mg/kg	0.001		< RL	0.001		< RL	
NPIP	100-75-4	mg/kg	0.001		< RL	0.001		< RL	
NPYR	930-55-2	mg/kg	0.001		< RL	0.001		< RL	
NMOR	59-89-2	mg/kg	0.001		< RL	0.001		< RL	
NEPhA	612-64-6	mg/kg	0.005		< RL	0.005		< RL	
NMPhA	614-00-6	mg/kg	0.005		< RL	0.005		< RL	
NDiNA	1207995-62-7	mg/kg	0.005		< RL	0.005		< RL	
NDBzA	5336-53-8	mg/kg	0.005		< RL	0.005		< RL	
Total <sup>#</sup>		mg/kg	0.005	0.01	< RL	0.005	0.1	< RL	
Conclusion				Pass		Pass			

Abbreviation:

- = Less than
- RL

<

- = Reporting Limit
- mg/kg = milligram per kilogram



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### Remark:

\* List of Migratable N-Nitrosamines and Migratable N-Nitrosatable Substances.

Parameter	Abbreviation
N-nitrosodimethylamine	NDMA
N-nitrosodiethylamine	NDEA
N-nitrosodipropylamine	NDPA
N-nitrosodiisobutylamine	NDiBA
N-nitrosodibutylamine	NDBA
N-nitrosopiperidine	NPIP
N-nitrosopyrrolidine	NPYR
N-nitrosomorpholine	NMOR
N-nitrosoethylphenylamine	NEPhA
N-nitrosomethylphenylamine	NMPhA
N-nitrosodiisononylamine	NDiNA
N-nitrosodibenzylamine	NDBzA

- \*\* Single components with an amount of less than the detection limit were not considered by the calculation of the sum. In the case of all compounds were not detected, the results is stated <RL.
- Results for total N-nitrosatables substances or N-nitrosamines have been adjusted with analytical tolerances if the condition stated in EN 12868:2017 clause 11.1 is fulfilled:
  Analytical tolerance for the total quantity of N-nitrosamines: 0.01 mg/kg.
  Analytical tolerance for the total quantity of N-nitrosatable substances: 0.1 mg/kg.



## Test Report No.: 244461040f 001

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### 3.9 Formaldehyde release

Test Method: EN 14350:2020 Clause 8.7; with reference to EN 71-11:2005

### **Test Result :**

				Test No.	1^^
				Material No.:	6E
Parameter	CAS No.	Unit	RL	Requirement	Result
Formaldehyde	50-00-0	mg/l	0.2	0.5	< RL
Conclusion	•			•	PASS

Abbreviation:	<	= Less than	
	RL	= Reporting Limit	

RL	= Reporting	Limit

mg/l = milligram per liter



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### 3.10 Color Fastness

Test Method: EN 14350:2020 Clause 8.8 Test result

Test No.:	1	2
Material No.:	6A	6B
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
3% Acetic acid	No	No
Coconut fat	No	No

Test No.:	3	4^
Material No.:	6C 6D	
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
3% Acetic acid	No	No
Coconut fat	No	No

Test No.:	5	6
Material No.:	6F	6G
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
3% Acetic acid	No	No
Coconut fat	No	No

Test No.:	7	8
Material No.:	6Н	61
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
3% Acetic acid	No	No
Coconut fat	No	No

TÜV Rheinland (Shanghai) Co., Ltd. Shanghai TÜV Rheinland Building, No. 177, Lane 777, West Guangzhong Road, Jing'an District, Shanghai 200072, P.R. China



## Test Report No.: 244461040f 001

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Test No.:	9	10
Material No.:	6J	6К
Parameter Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
3% Acetic acid	No	No
Coconut fat	No	No

^ Test results refer to 244461040a 001

^ Test results refer to 244461040d 001



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# 4. EN 14350:2020 Child care articles - Drinking equipment - Safety requirements and test methods - Mechanical requirements and tests

#### Test result:

Test No:	T001
	6, 6-1
6 Construction and mechanical properties - General and sample preparation	
6.4 Boiling	PASS
7 Construction and mechanical requirements and tests	
7.2 Decoration, inscription and decals	PASS
7.3 Visual and tactile examination	PASS
7.4 Small parts	PASS
7.6 Requirements and tests for containers	PASS
7.7 Requirements and tests for drinking accessories	PASS
7.8 Protective covers	PASS
7.10 Finger traps	PASS
7.11 Protruding parts	PASS
7.12 Cords or loops	PASS
9 Consumer packaging	PASS
10 Product information	
10.1 General	PASS
10.2 Purchase information	PASS
10.3 Warnings	PASS
10.4 Instructions for use	PASS

The clause and/or sub-clause would be indicated only in the test report whichever applicable. The comprehensive result report is available upon request.



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# 5. EN 14350:2020 Child care articles - Drinking equipment - Safety requirements and test methods - Clause 8.6 Migration of certain elements

Test Method: EN 14350:2020 Clause 8.6, with reference to EN 71-3:2019

#### Test Result:

			Test No.	T001	T002	T003
			Material No.	6F	6G	6H
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	6000	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	120	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	10	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	4000	< RL	< RL	< RL
Boron (B)	mg/kg	10	3200	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	3.6	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	100	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.002#	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	2.8	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	1660	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	5.0	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	600	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	20	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	56	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	100	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	12000	< RL	< RL	< RL
Tin (Sn)	mg/kg	0.5	40000	< RL	< RL	< RL
Organic Tin^	mg/kg	0.2	2.5	-	-	-
Zinc (Zn)	mg/kg	10	10000	< RL	< RL	< RL

#### Abbreviation: < less than

#### RL = Reporting Limit

- denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (0.72 mg/kg)
- # According to EN 14350:2020, the limit of Cr(VI) is 0.002 mg/kg. However, the technical specificities were considered and whenever the Cr(VI) level measured in the sample is below the Limit of Quantification of the valid version of EN 71-3, the sample is to be considered passed.

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#### Test Result:

Test No.				T004	T005	T006
		6D	6J	6K		
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	6000	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	120	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	10	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	4000	< RL	< RL	< RL
Boron (B)	mg/kg	10	3200	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	3.6	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	100	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.002#	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	2.8	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	1660	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	5.0	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	600	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	20	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	56	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	100	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	12000	< RL	< RL	< RL
Tin (Sn)	mg/kg	0.5	40000	< RL	< RL	< RL
Organic Tin^	mg/kg	0.2	2.5	-	-	-
Zinc (Zn)	mg/kg	10	10000	< RL	< RL	< RL

Abbreviation: <

less than

- denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (0.72 mg/kg)
- # According to EN 14350:2020, the limit of Cr(VI) is 0.002 mg/kg. However, the technical specificities were considered and whenever the Cr(VI) level measured in the sample is below the Limit of Quantification of the valid version of EN 71-3, the sample is to be considered passed.

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			Test No.	T007	T008	T009
		61	6B	6A		
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	6000	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	120	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	10	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	4000	< RL	< RL	< RL
Boron (B)	mg/kg	10	3200	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	3.6	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	100	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.002#	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	2.8	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	1660	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	5.0	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	600	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	20	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	56	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	100	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	12000	< RL	< RL	< RL
Tin (Sn)	mg/kg	0.5	40000	< RL	< RL	< RL
Organic Tin^	mg/kg	0.2	2.5	-	-	-
Zinc (Zn)	mg/kg	10	10000	< RL	< RL	< RL

Abbreviation: <

less than

- denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (0.72 mg/kg)
- # According to EN 14350:2020, the limit of Cr(VI) is 0.002 mg/kg. However, the technical specificities were considered and whenever the Cr(VI) level measured in the sample is below the Limit of Quantification of the valid version of EN 71-3, the sample is to be considered passed.

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### Test Result:

Test No.				T010	T011	T012
Material No.				6C	6E	6L
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
Aluminium (Al)	mg/kg	10	6000	< RL	< RL	< RL
Antimony (Sb)	mg/kg	5	120	< RL	< RL	< RL
Arsenic (As)	mg/kg	5	10	< RL	< RL	< RL
Barium (Ba)	mg/kg	2.5	4000	< RL	< RL	< RL
Boron (B)	mg/kg	10	3200	< RL	< RL	< RL
Cadmium (Cd)	mg/kg	1	3.6	< RL	< RL	< RL
Chromium III (Cr(III))	mg/kg	10	100	< RL	< RL	< RL
Chromium VI (Cr(VI))	mg/kg	0.045	0.002#	< RL	< RL	< RL
Cobalt (Co)	mg/kg	2.5	2.8	< RL	< RL	< RL
Copper (Cu)	mg/kg	2.5	1660	< RL	< RL	< RL
Lead (Pb)	mg/kg	2.5	5.0	< RL	< RL	< RL
Manganese (Mn)	mg/kg	2.5	600	< RL	< RL	< RL
Mercury (Hg)	mg/kg	2.5	20	< RL	< RL	< RL
Nickel (Ni)	mg/kg	2.5	56	< RL	< RL	< RL
Selenium (Se)	mg/kg	10	100	< RL	< RL	< RL
Strontium (Sr)	mg/kg	2.5	12000	< RL	< RL	< RL
Tin (Sn)	mg/kg	0.5	40000	< RL	< RL	< RL
Organic Tin^	mg/kg	0.2	2.5	-	-	-
Zinc (Zn)	mg/kg	10	10000	< RL	< RL	< RL

Abbreviation: <

less than

- denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (0.72 mg/kg)
- # According to EN 14350:2020, the limit of Cr(VI) is 0.002 mg/kg. However, the technical specificities were considered and whenever the Cr(VI) level measured in the sample is below the Limit of Quantification of the valid version of EN 71-3, the sample is to be considered passed.



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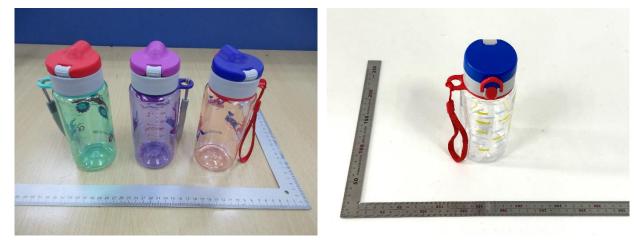
### Remark:

\* Cr(VI) content has been performed with reference to EN 71-3:2019, Annex F (analyzed by LC-ICP-MS or IC-ICP-MS/MS). Cr(III) content was confirmed by calculation.



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6. Sample picture(s):



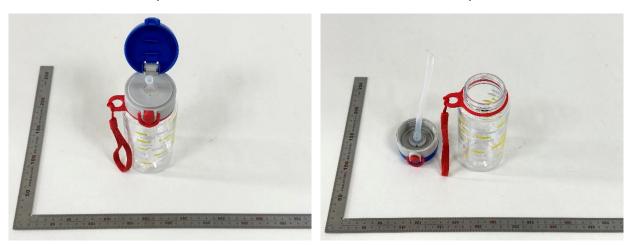
Item 6

Item 6



Sample 6

Sample 6



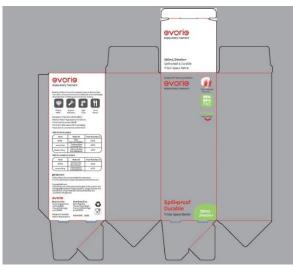
Sample 6

Sample 6

TÜV Rheinland (Shanghai) Co., Ltd. Shanghai TÜV Rheinland Building, No. 177, Lane 777, West Guangzhong Road, Jing'an District, Shanghai 200072, P.R. China



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Packaging The packaging was provided by client.

尺寸:90\*100mm



Instructions The instructions were provided by client.

- END -



Packaging The packaging was provided by client.



#### General Terms and Conditions of Business of TÜV Rheinland in Greater China

- These General Terms and Conditions of Business of TÜV Rheinland in Greater China ('GTCB') is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ('TÜV Rheinland'). The Greater China hereor feres to Mainland China, Hong Kong and Taiwan. The client hereof includes:
- a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use; (ii) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.
- The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract
- standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No dard contractual terms and conditions of the client shall form part of the contract even if TUV Rheinland does not killy object to them.
- In the context of an angoing business relationship with the client, this GTCB shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party. Coming into effect and duration of contracts

- The contract shall cance into effect or the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by toth contracting parities, or upon the works requested by the client being carried out by TÜV Rheinland is i, in its sole discretion, entitied to accept the order by griving written notes of such acceptance (including notice set is a decision); entities and is object the requested set of the order by griving written notes of such acceptance (including notice set is a decision); entities of the requested set of the order by griving written notes of such acceptance (including notice set is a decision); entities of the requested set of the order by griving written proteins of the order by griving in the requested set of the order by griving written or the order by griving written or the order by griving written order of such acceptance (including notice set is a decision); entities of the order by griving written order by griving written order of such acceptance (including notice set is a decision); entities of the order by griving written order by gri
- The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for term agreed in the contract.
- 3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for the contract unless terminated in writing by either party with a three-month notice prior to the end of the contractual term.

#### Scope of services

- The second speed for services to be provided by TOV Panishee shall be second as the constrained as agreed services of the service second secon 4.1
- The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into 4.2 4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.
- execution of the work there shall be no simultaneous assumption of any guarantee of the contentness (proper teching option striker tested or generation parts work of the installation as a whole and the upsteam who do asset in particular. (IV Mentrias data all same no responsible) for the construction, seekicion of materials aready in particular. (IV Mentrias data all same no responsible) for the construction, seekicion of materials expression (seekicion) and the same and application in accordance with regulations, unless these expression (seekicion) and the construction of the construction. 4.4
- 4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.
- If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional direction direction and the second secon
- services to be provided by TUV Rheinland under the contract are agreed exclusively with the client. A contract of third ties with the services of TUV Rheinland, as well as making available of and justifying confidence in the work results (the orts, test result), expert reports, etc.) is not part of the agreed services. This also applies if the client passes on work ubs in full or in extracts to third parties in accordance with clause 11.4.
- to the second se
- nearia. The service context agreed in the contract, if the client requires TUV Rheinland to deliver relevant test samples, data to any overseas laboratory or other places or altes to be designated by the client, TUV Rheinland shall not take any consolities or risks for any problems during such delivery and the transportation process (including but not limited to loss or damages of the samples and/or the materials, etc.) because, he relevant limited the borne by the

- The contractually agreed periods/dates of performance are based on estimates of the work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in unitiened.
- If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TUV Rheinland. 52
- Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland. 5.3 54
- is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cordance with clause 6.1 or has not done so in time and, in particular, has not provided TUV Rheinland with nd information required for the performance of the service as specified in the contract. 5.5
- If the performance of TÜV Rhininan'is delayed due to unforeseeable circumstances such as force majerum, stilkes, business disruptions, governmental regulations, transport obstacles, etc. . TÜV Rhinihand is entitled to postpone performance for a reasonable period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to resume performance. 5.6
- If the client is deliged to comply with legal, officially prescribed and/or by the accreditor prescribed deadlines, it is the client responsibility to agree on performance dates with TUV Rheinland, which enable the client to comply with the legal and/or officially prescribed deadlines. TUV Rheinland assumes no responsibility in this respect unless TUV Rheinland apressly agreed in writing specifically attang the ensuing the deadlines is the contractual digision of TUV Rheinland.

- The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TUV Rheinland. 6.1 6.2
- no cost to TUV Reveniend. sing documents, togeties, axuitary staff, etc. necessary for performance of the services shall be made available free of singe by the dismit. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions. a least result of the dismit staff, etc. necessary for performance of the services and evaluation and a least result of the dismit staff, etc. necessary for performance of the services and regulations; and b) the product, service or management system to be certained complete with applicabilities and regulations; and b) leage and Dismost Acts of Prospect and product of the least of the services of the top of the services of 6.3

- If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TUV Rhein/and valid at the time of performance. ies arread work shall be invoiced according to the prograss of the work
- 7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in

ny 2023

n 5.0/February 2023

This GTCB is only used for TÜV Rheinland Business Stream Products

- 8.1 All invoice amounts shall be due for payment within 30 days of the invoice date without deduction on receipt of the invoice. No discounts and rebates shall be granted.
- 8.2 all be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client
- 8.3 In cases of default of payment, TÜV Rheinland shall be enlifed to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.
- Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheintand shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue performance of the contract. 8.4
- . The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolv proceedings has been distributed use to lack of assets.

TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued

rs to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.
 einland shall be entitled to demand appropriate advance payments.

one month prior to the date to which the risks in their shall come into affect protocid of anticic of datages in term). If the risks in their simulation under 6% per constrainability in its edited in that if not have the right to the terminate the contract if the risk in the edit of the period of anticic of the risks in the edit of the period of the risks of the risks the contract is not terminated, the changed fees shall be detended to have been agreed two have to of the period of the risks o

- blished and undis ted claims may be offset against claims by TÜV Rheinland 8.10
- TÜV Rheinland shall have the right at all times to setoff any amount due or payable by the client, including but not limited to setoff against any fees paid by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland

#### Accentance of work

- Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately. 9.1
- 9.2 If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this period stating at least one fundmental breach of contract by TUV Rheinland.
- the client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rh If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place. 9.4
- The term of the product stage, if the client was unable to make use of the term environs provided for within this scope is burget to follow the stage of the scope is an environment of the term of the term of the scope is performance of auveillance audit, or if the client cancels or postpones a confirmed audit date within the O2 levels to the agreed date. TW Relenand is entited to immediately charge the lamp-smir compression of 10% of the order anno as comparation for organizes. The client markets the right is prove that the TWV Relenand has immund no attraction as comparation for organizes. The client markets the right is prove that the TWV Relenand has immund no attraction databased or conductly been strategies that the door to the term of the order annous that there are not as conducted by the term term of the relative term of the term of the order annous that there are not as conducted by term terms the term of the term of the order annous that there are not as conducted by term terms of the relative term of the term of the order annous that there are not as conducted by term terms of the relative term of the term of the order annous that the relative or order is the term of the term of the relative term of the term of term 9.5
- sofar as the client has undertaken in the contract to accept services, TÜV Rheinland shall also be entitled to charge mp-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called thin one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred damage whatsoever or only a considerably lower damage than the above mentioned lump sum. 9.6

10.3

10.4

- **10.** 10.1 For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, documents, image, davings, expertise, information, data, test estats, reports, samples, report documents, prioriga and francial information, castorer and supplier information, and marketing bedravinge and materials, imagible or itanyisity, that are supplied, transferred or otherwise disclosed by one Party (the "disclosing party") be to other Party (the Tracewing party") whiling or orally, implient or destront cleanse. Confidential information is experied, not the data and know-how collected whiling or crait, implier or destront cleanse. Confidential information is experied, not the data and know-how collected terms of the terms of te supplies, Transmenso or ordenives activates activates by one any time activation party to the cover harmy (the "activity party into a cover harmy) (the activity party into a cover harmy (the "activity party into a cover harmy (the activity party into a cover harmy)) (the activity party into a cover harmy (the activity party into a cover harmy (the activity party into a cover harmy)) (the activity party into activity party into a cover harmy (the activity party into activity party i
- analysing the provision of services. The disclosing park which mark all confidential information disclosed in written term as confidential before passing to otto the receiving park. The same apprecise to confidential information transmitted by e-mail. It confidential information disclosed only, the receiving park wild be appropriately information in advance and the disclosing park park and the receiving park. The same apprecise to confidential information to advance and the disclosing park park and that is do so which the signated period, the receiving park shall not ble any confidentially excitations thermatch these the control of the signated period, the receiving park shall not ble any confidentially excitations thermatch terms TOV Releases of damages of the advance of the disclosing and the share shall be advance and the disclosing and a share of the discloses or damages of the advance of the disclose of the advance of the disclose of the advance of the advance of the disclose of the advance of the
- All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland: may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise ag writing by the disclosing party.
- may not be copied, distibuted, published or otherwise disclosed by the receiving party, unless this is necessary for halfling the purpose of the context or TUP Maniferial to required to pass on contributing information, inspection propose or the relevant effect and or indext processor provides on the relevant effect and indext and the relevant effect and indext processor provides or the relevant effect and indext processor provides or the center of the context. Here the anticidance which explores the context is standards or test requirements provides of the client's test products and/or certified products, etc.) that are involved in the performance of the context:
- must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protec confidential information, but never with a lesser level of confidentiality than that which is reasonably required. The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to observe the same level of accretory as all form in this confidentially clasus.
- 10.5 ion for which the receiving party can furnish proof that: . it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party, or a)
  - it was disclosed to the receiving party by a third party entitled to disclose this info
  - the receiving party already possessed this information prior to disclosure by the disclosing party; o
  - the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be dee "confidential information" as defined in this confidentiality clause.
  - All conditional information and main the property of the disolation gamp, the receiving any hereby spaces to the constants of promotion and information information. The disolation gamp, the receiving any hereby spaces to the constants of the disolation of the context of the constant of the disolation gamp. The disolation gamp and the constant of the disolation gamp, to destroy all conditional information. Including all copies, and confirm the destruction of the confidential information to the disolation gamp, in milling, any time it to respectively by the disolation gamp. The disolation gamp and the space is repeared their termination of early of the context. This does not seend to include reports and confictuate prevent belower. TWJ Retention of serietist on which is cosied start the process, certifications and confidential information that forms the basis to preparing these reports and certificaties in order to evidence the contextents of the result and to grant documentation upproves required to them. Spaced and the prevent and the prevent the basis to preparing these reports and certificaties in order to evidence the contextens of the results and for grant documentation upproves required to them.
- From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and shall not disclose this information to any third parties or use it for itself. 10.7

#### Copyrights and rights of use, pub 11.1

- UV Rheinian a term ingris or use, parameterio and a parameterio a a parameterio and 11.2
  - It receives a simple, unlimited, non-transferable, non-sublicensable right of use to the contents of the work results d within the scope of the contract, unless otherwise agreed by the parties in a separate agreement. The dirent may such reports, expert reports/opinions, test reports/itesuits, results calculations, presentations etc. prepared within e of the contract the contractually agreed purpose.
- The transfer of right of use of the generated work results regulated in clause 11.2. of the GTCB is subject to full payr of the remuneration agreed in favour of TÜV Rheinland. 11.3 The client may use work results only complete and unshortened. The client may only pass on the work results in full unless TÜV Rheinland has given its prior written consent to the partial passing on of work results.
- Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope regulated in dause 11.2, and any optication of the introduction of TUV Rheniration tend the prior written approval of TUV Rheniration tends in individue case. Beades, the cleater resurse that the advectation use table complex with relevant applicable laws, regulations and relevant rules (including but not limited to specific applicable testing and certification rules and the state of th 11.5
- TÜV Rheinland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw ublications. 11.6 11.7
  - The consent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification mark of TÜV Rheinland.

#### 12. Liability of TÜV Rheinland 12.1

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- Learning of TUV NiteRinkand Intergencies of the legal basis, to the fulless source parenticed by applicabilities in the event of a based in discontential Memory and the legal basis is the fulless source parenticed by applicabilities in the event of a based in discontential Memory and the legal basis is the fulless source parenticed by applicabilities of the memory and the discontential file, there interest is outcal for fulle the entities contract. (b) in the case of a contract with a faced overall the parenticed is the parenticed based overall based on the entities of the memory appendix the source of the testing applicability of parenticed based overall based on the entities contract. (b) in the case of a contract of the faced overall the parenticed based overall based on the entities of the testing of a based of the applicability of parenticed based overall based on the source overall based on the testing of the parenticed by applicability applicability of parenticed based overall based on the testing of the testing of the testing of the testing of the testing overall based on the parenticed based to parentice the testing of the testing of the testing of the testing of the testing over the testing over the testing overall based on the testing of the testing of the testing of the testing of the testing overall based on the testing of the testing overall based on the testing of the testing overall based on the testing overall based
- The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TUV Rheinland or its vicatious agents. Such limitation shall not apply to damages for a person's death, physical injury or lines. 12.2 12.3
- protein formation protein proj on more of contract, TUV Rherinard will be liable even where minor negligence is involves For this purpose, a "fundamental breach" is breach of a material contractual dolgaton, the performance of which permit the due performance of the contract. And dolgator is an advanterial breach of contract shall be limited to be amount of damages reastantially interseen as a possible consequence of such breach of contract at the limite of the breacht performance of the contract. And dolgator of the contracture of duration of the contract and the limited to be amount of damages reastantially interseen as a possible consequence of such breach of contract at the limite of the breach (reacculty foresearche) and the contracture of the contracture of duration bench in the contract of the contracture of the contract of the forest of the contracture of the contrac
- TÜV Rheniand shall not be lable for the acts of the personnel made available by the circle to support TÜV Rheniand in the performance of its services under the contract, unless such personnel made available is regarded as vicanicus agent of TÜV Rheniand. If TUV Rheniand is not lable for the acts of the personnel made available the direct under the foregoing provision, the circle stall indemnity TUV Rheniand against any claims made by third parties arising from or in connection with such personnel's acts. 12.4
- 12.5 Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client. 12.6 ion nariode for claime for dam eball he based on et-12.7
- None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.

#### When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.

## The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign table legislations or embargos and/or sanctions. In the event of a violation, TUV Rheindau Heard by TUV Rheindau, the international effects and the client shall compressed for the losses incured thereof by TUV Rheindau.

- Data protection notice The client understand and agrees that TUV Revisiting processes personal data (including but not limited to personal information) of the client and its instated parkets (including but not limited to the subject of the client) for the purpose of billing information) of the client and its instated parkets (including but not limited to the subject of the client) for the purpose of billing incomation of the client and its instated parkets (including but not limited to the subject of the client). To TUV Revisited to access, use, or process the personal data that the client cliented or processes of yound and transferred to 100° Revisited access, use, or process the personal data that was collected, the client also confirms that its access access, use the elevant legal basis. Turk personal data that but be discussed or therefored to any through any or any oversas party clicide of the district in which the personal data that suc collected, the intereformed to any through the personal the personal data the dedeed immediately as soon as a comparing reason to feation alsons that has claimed to personal data the dedeed immediately as soon as a comparing reason to feation alsons. They is accessing the personal data that be dedeed immediately as soon as a comparing reason to feation alsons, the personal data that be dedeed immediately as soon as a comparing reason to feation alsons, the personal data that be dedeed immediately as soon as a comparing reason to feation alsons, the personal data the to dedeed immediate to the full target and the disclosed register and the dedeed immediate to the full target and the the personal data that and client and personal data the top dedeed interdeation of the data target and the the processing of personal data. The top target and the personal data the top development data protection supervision authority. For further details conficient data the personal data the top top and mediate the personal data the data target and the data target and the data the pe

#### 15 on of test material and docu

- 15.1 The test samples submitted by the client to TÜV Rheinland for testing will be scrapped following testing or will be returned to the client at the client's expense. The only exceptions are test samples, which are placed in storage on the basis of statutory regulations or of another agreement with the client. Charges apply if the test samples are stored at the premises of TÜV Rheinland. The cost of placing a test sample into storage will be disclosed to the client in the quotation. 15.2
- If reference samples or documentations are given to the client to be placed in storage at their premises, the reference samples or documentations must be made available to TUV Rheiritand upon request promply and free of change. If the client, in negorose to such a sequed, it is chapable or mainting available for reference samples and/or documentation, any liability clients for material and pocuriary damage reaulting from the respective testing and certification that is brought forward by the direct material and pocuriary damage resulting from the respective testing and certification that is brought forward by the direct adjusticity of the same state of the same state of the same state. If the same state is the same state of the same st 15.3
- 15.4 The retention period for the documentation shall be 10 (ten) years after the expiry of the test mark certificates or shall in the applicable legal requirements for EU/EC certificates of conformity and GS mark certificates.
- The costs of the handover and dispatch of the test samples for storage on the client's premises are borne by the client. TÜV Rheinland wil be liable for the loss of test samples or reference samples from the laboratories or warehouses of TÜV Rheinland only in case of gross negligence. 15.5

#### Termination of the contract 16.1

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- Nonihistanding clause 3.3 of the GTCB, TUV Rhenhand and the client are entitled to terminate the contract in its entirety or, in the case of services combined in one contract, each of the contract disk dually and independently of the contraction of the remaining services with all (provide horices to the of the contractually agreed term. The notice period that be shortnered to six (IV) weeks in case TUV Rhenhand is prevented from performing the service due to a loss or a supersision of a secondation or molicitation.
- For good causes, TÜV Rheinland may consider giving a written notice to the client to terminate the contract without be any liabilities and the client shall pay the relevant service fees for the services provided by TÜV Rheinland due to the termination date of the contract. The adressal good causes includes but not limited to the following: a) the client does not immediately notify TÜV Rheinland of changes in the conditions within the c relevant for certification or signs of such changes; tion mark or uses it in violation of the co
  - ses the certificate or certifi c) in the event of several consecutive delays in payment (at least three times):
  - d) a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contract-tale inferioration.
  - e) in the event of any serious misrepresentation, be it by intentional fraud or grossly negligent behavior of the management employees or agents of the ciren; f) if TÜV Rheinland, for reasons beyond its control, is temporarily or finally not able or entitled to continue or finalize the performance of the service, e.g. in case of force majeure, government interference, sanctions, loss of accreditation or polification or other.
  - g) if the country/region involved in the whole contract or the specific service project in the contract does not belong to the insurance coverage applicable to TÜV Rheinfand, and TÜV Rheinland believes that there is a risk or some risks beyond its control to contrinue to perform the contract.
- 16.3
- In the event of termination with written notice by TUV Rheniand for good cause, TUV Rheniand shall be entitled to a lump sum claim for dramage against the cleint if the conditions of a claim for dramages exist. In this case, the cleint shall over 15% of the remineration to be paid writtle and of the failed oristics them a lump-sum compresation. The cleint reserves the right to prove that there is no dramage or a considerably lover damage, TUV Rheinland reserves the right to prove a considerably highed tomage in individual cases. 16.4
- TÜV Rheinland is also entified to terminate the contract with written notice if the clerit has not been able to make use of the me windows for sufficing service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be writtdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.

In the absence of proof to the contrary, the following events affecting a Party shall be presumed to fulfil conditi b) under paragraph 1 of this Clause: (i) war (whether declared or not), hostilities, invasion, act of foreign enem v) unume perspanjant i un sus subset: v) wars (methed declared or not), hostilies, invasión, act of foreign enemies, sectoriare millay moltadianos (i) olivi vás, not, hedelino and reclutados, millary or cursoparto pover, insurancico, act of unitarial, constaines taria sectoriare a sectoriare energia ener

are too-cort, g-room, occupation of lationtes and premeté The Party successful inviking in its Classes releved tion its duy to perform its edigations under the contract and for any labeling in damages of itom any other contractual energy for breach of contract, from the limit at which the impedi-tion of the performance diality, the settile of electric from the time at which noice breater directions the other performance diality, the settile of electric from the time at which noice breater directions the other performance of the impediment of event invided is therefore, the direct account of the performance of the performance of the diprivation of the performance of the performanc

The Parties are bound to perform their contractual duties ever if events have tendened performance more rous than could reasonably have been anticipated at the time of the conclusion of the contract. Notwithstanding paragraph 1 of this Clause, where a Party proves that:

(a) the continued performance of its contractual duties has become excessively onerous due to an event beyond its reasonable control which it could not reasonably have been expected to have taken into account at the time of the conclusion of the contract; and that

(b) it could not reasonably have avoided or overcome the event or its consequences, the Parties are bound, within a reasonable time of the invocation of this Clause, to negotiate alternative contractual terms which reasonably allow to overcome the consequences of the event.

Where Clause 18.2 applies, but where the Parties have been unable to agree alternative contractual terms as provided in that paragraph, the Party invoking this Clause is entitled to terminate the contract, but cannot request adaptation by the judge or abitrative without the agreement of the other Party.

Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.

Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:

if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.

if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.

Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:

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in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association. Taipei to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place

in the case of TÚV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.

The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.

cution thereof shall be settled friend

if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan.

Partial invalidity, written form, place of jurisdiction and dispute resolution All amendments and supplements must be in writing in order to be effective. This also applies to ame supplements to this clause 17.1.

Any dispute in connection with the contract and these terms and conditions or the ex through negotiations.

# Force Majeure' means the occurrence of an event or oircumstance that prevents or impedes a Party from performing one or more of its contractual obligations under the contract. If and to the estent that that Party proves: by that such impediment the contract, and (c) that the effects of the impediment could not reasonably have been avoident or wareness. If and affacted Party.

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