



# TEST REPORT

**Applicant** : Guangzhou Guangshen Electric Manufacturing Co., Ltd  
**Address** : No. 20, Xinshuikeng Section, Shixin Road, Dalong Street, Panyu District, Guangzhou  
**Manufacturer** : HUBEI GUANGSHEN ELECTRIC CO., LTD.  
**Address** : Xian'an Economic Development Zone, Xianning City, Hubei Province

## Report on the submitted samples said to be:

**Sample Name(s)** : Commercial ice cream machine  
**Trade Mark** : N/A  
**Part No.** : BJK288, BJK388, BJK428, BHT428, BHT588, BH568, BH688, BH728, ST16, ST18, ST21, ST32, ST48, BQ18, BQ32  
**Sample Received Date** : April 16, 2022  
**Testing Period** : April 16, 2022~ April 27, 2022  
**Date of Report** : April 27, 2022  
**Results** : Please refer to next page(s).

Signed for and on behalf of LCS

Young/Laboratory Manager





TEST REQUEST	Conclusion
A. As specified by the client, to determine ABS material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 180.22& 181.32	PASS
B. As specified by the client, to determine PVC material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 175.300.	PASS
C. As specified by the client, to determine PP material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 177.1520.	PASS
D. As specified by the client, to determine PE material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 177.1520.	PASS
E. As specified by the client, to determine Nylon material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 177.1500.	PASS
F. As specified by client, to determine metal material in accordance with USA Food and Drug Administration Regulations FDA GRAs (not use for cooking).	PASS
G. As specified by the client, to determine silicon material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 177.2600.	PASS
H. As specified by the client, to determine POM material in accordance with USA Food and Drug Administration Regulations FDA 21CFR 177.2480.	PASS



**Tested part(s):**

- |   |  |
|---|--|
| (1) Black plastic shell (ABS)                     | (7) Red plastic cap (PE)                     |
| (2) Silver metal basin (Stainless Steel 201)      | (8) White plastic case (PA66)                |
| (3) Silver metal inner tube (Stainless Steel 304) | (9) Silver metal shell (Stainless Steel 304) |
| (4) White plastic (homopolymer PP)                | (10) Black soft plastic ring (silicone)      |
| (5) Black plastic head (ABS)                      | (11) Transparent soft plastic (silicone)     |
| (6) White soft plastic pipe (PVC)                 | (12) White plastic back cover (POM)          |

**Results:****A. With reference to FDA 21CFR 180.22& 181.32**

Test Item(s)	Test Condition	MDL (mg/in <sup>2</sup> )	Test Result(s) (mg/in <sup>2</sup> )		Limit (mg/in <sup>2</sup> )
			(1)	(5)	
Acrylonitrile extract	Water, 120°F, 24h	0.001	N.D.	N.D.	0.003
	3%(v/v) Acetic acid, 120°F, 24h	0.001	N.D.	N.D.	0.003
	8%(v/v) Ethanol, 120°F, 24h	0.001	N.D.	N.D.	0.003
	50%(v/v) Ethanol, 120°F, 24h	0.001	N.D.	N.D.	0.003
	n-heptane, 120°F, 24h	0.001	N.D.	N.D.	0.003

## Note:

- MDL = Method Detection Limit
- N.D. = Not Detected (or <MDL)
- As specified by client, only test the designated sample

**B. With reference to FDA 21CFR 175. 300**

Test Items	Test Condition	MDL (mg/in <sup>2</sup> )	Result (mg/in <sup>2</sup> )	Limit (mg/in <sup>2</sup> )
			(6)	
Water extractives	Water, 120°F, 24h	0.5	N.D.	18
n-heptane extractives	n-heptane, 70°F, 30 min	0.5	N.D.	18

## Note:

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**C. With reference to FDA 21CFR 177.1520**

Test Items	Test Condition	Unit	MDL	Result(s)	Limit
				(4)	
Density	-	g/cm <sup>3</sup>	-	0.902	0.880~0.913
Melting point	-	°C	-	167.9	160~180
n-hexane extractives	Reflux, 2h	%,w/w	0.2	0.5	6.4
Xylene extractives	Heat to 120°C until fully dissolved, Rapid cooling to 25°C, holding 1h	%,w/w	0.2	1.3	9.8

Note:

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- “-“= Not regulation
- As specified by client, only test the designated sample

**D. With reference to FDA 21CFR 177.1520**

Test Items	Test Condition	Unit	MDL	Result(s)	Limit
				(7)	
Density	-	g/cm <sup>3</sup>	-	0.913	0.85~1.00
n-hexane extractives	49~50°C, 2h	%,w/w	0.2	1.4	5.5
Xylene extractives	Reflux, 2h, slowly cool to 50°C, rapid cooling to 25~30°C keep for 1h	%,w/w	0.2	1.3	30

Note:

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- N.D. = Not Detected (or <MDL)
- “-“= Not regulation
- As specified by client, only test the designated sample



**E. With reference to US FDA 21CFR 177.1500**

Test Item(s)	Test Condition	Unit	MDL	Result(s)	Limit
				(8)	
Density	-	g/cm <sup>3</sup>	-	1.15	1.14±0.015
Melting point	-	°C	-	248.0	246.1~257.2
Solubility in boiling 4.2mol/L HCl	-	/	-	Dissolves in 1h	Dissolves in 1h
Water extractives	reflux 8h	%,w/w	0.01	N.D.	1.5
95% Ethanol extractives	reflux 8h	%,w/w	0.01	N.D.	1.5
Ethyl acetate extractives	reflux 8h	%,w/w	0.01	N.D.	0.2
Benzene extractives	reflux 8h	%,w/w	0.01	N.D.	0.2

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- “-“= Not regulation
- This product material is Nylon 66
- As specified by client, only test the designated sample

**F. With reference to FDA GRAs**

Test Item	Test Equipment	MDL (w/w)%	Test Result (w/w)%			Limit (w/w)%
			(2)	(3)	(9)	
Chromium (Cr)	ICP-OES	0.01	17.5	19.3	14.5	≥10.5

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**G. With reference to FDA 21CFR 177.2600**

Test Item(s)	Test Condition	MDL (mg/in <sup>2</sup> )	Test Result(s) (mg/in <sup>2</sup> )		Limit (mg/in <sup>2</sup> )
			(10)	(11)	
Water extractives	Water Reflux, First 7h Extraction	0.1	0.6	0.3	20
	Water Reflux, Succeeding 2h Extraction	0.1	0.4	0.1.	1
n-Hexane extractives	n-Hexane, First 7h Extraction	0.1	14.1	2.1	175
	n-Hexane, Succeeding 2h Extraction	0.1	1.6	0.5.	4

Note:

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- As specified by client, only test the designated sample

**H. With reference to US FDA 21CFR 177.2480**

Test Item(s)	Test Condition	Unit	MDL	Test Result(s)	Limit
				(12)	
Density	-	g/cm <sup>3</sup>	-	1.40	1.39~1.44
Melting point	-	°C	-	174.8	172~184
Chloroform-soluble extractives (Total extractable fraction in DI water)	48.9°C, 24h	mg/in <sup>2</sup>	0.1	N.D.	0.5
-Chloroform-soluble extractives (Total extractable fraction in n-heptane)	21°C, 30 min	mg/in <sup>2</sup>	0.1	N.D.	0.5
Total extractable fraction in D.I. water	Reflux 6h	%,w/w	0.1	N.D.	0.2
Total extractable fraction in n-heptane	Reflux 6h	%,w/w	0.1	N.D.	0.15

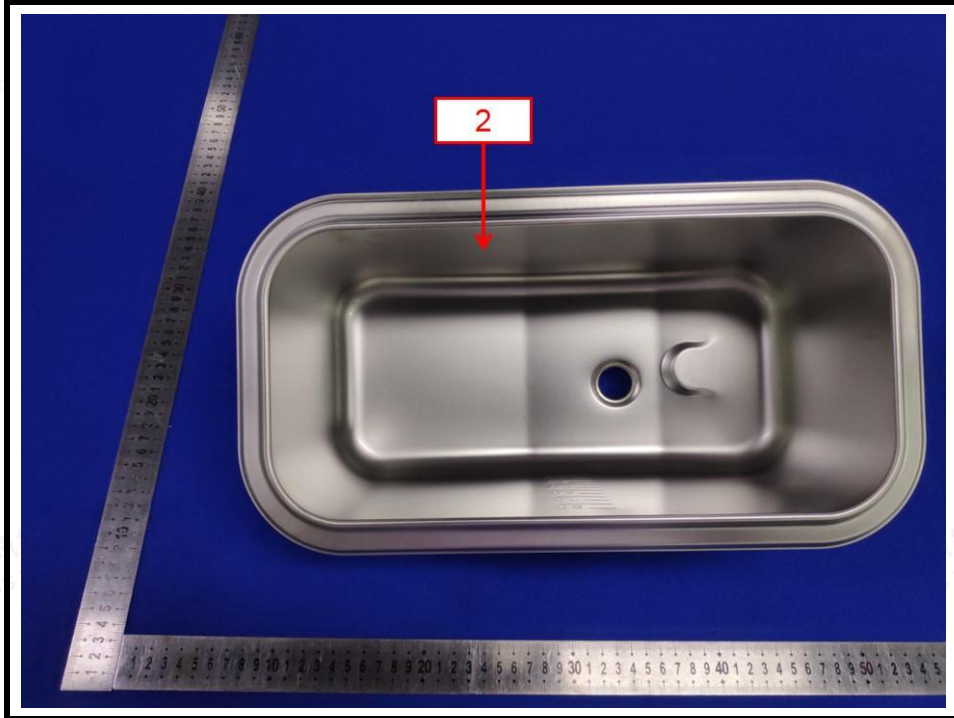
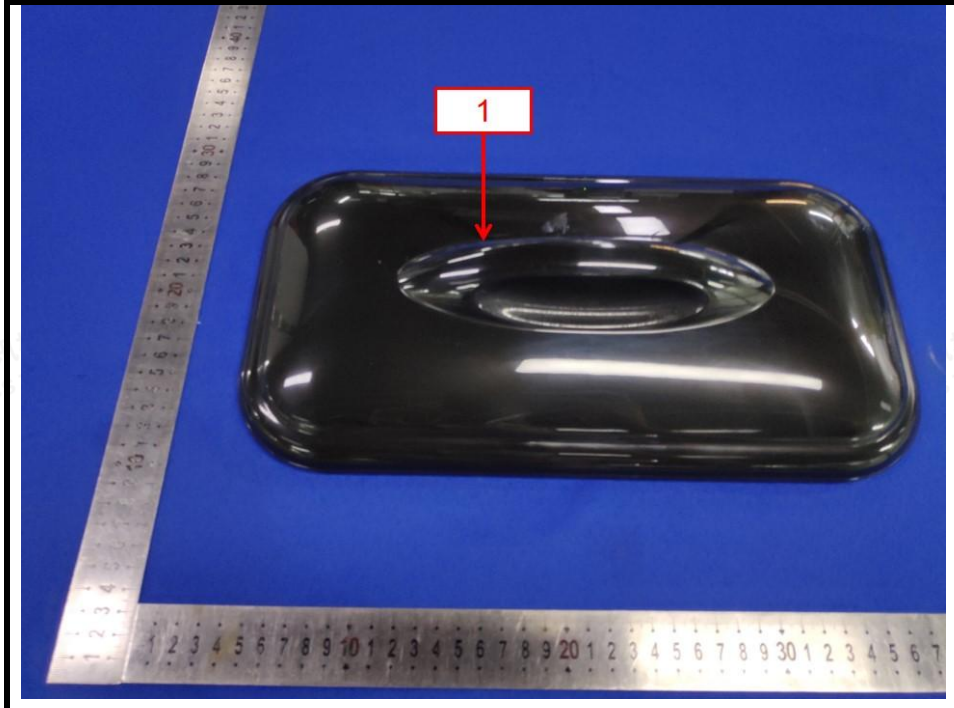
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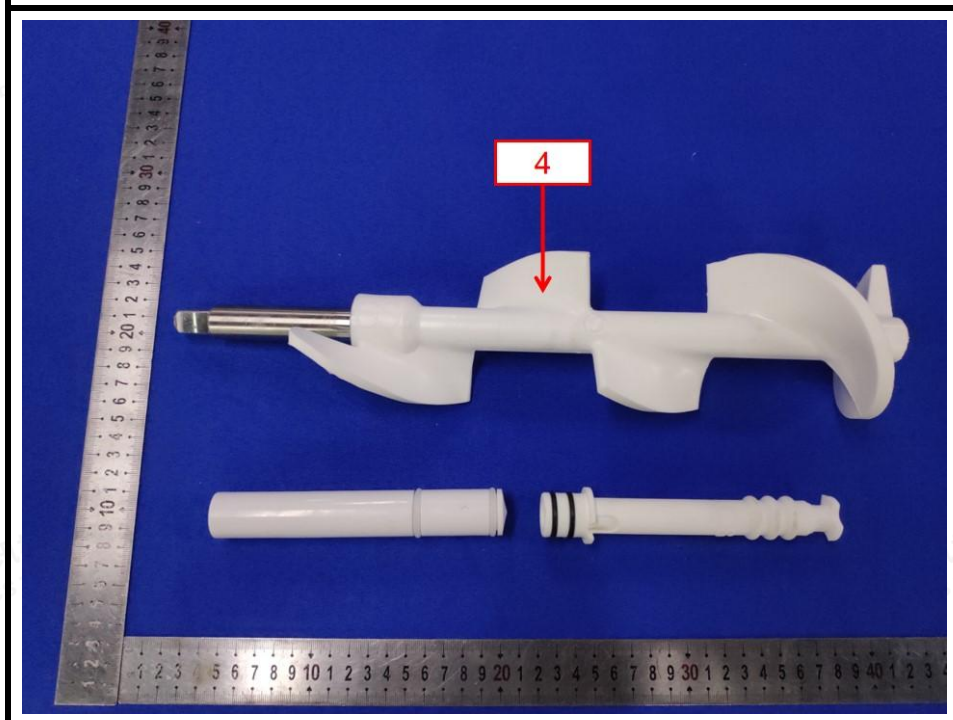
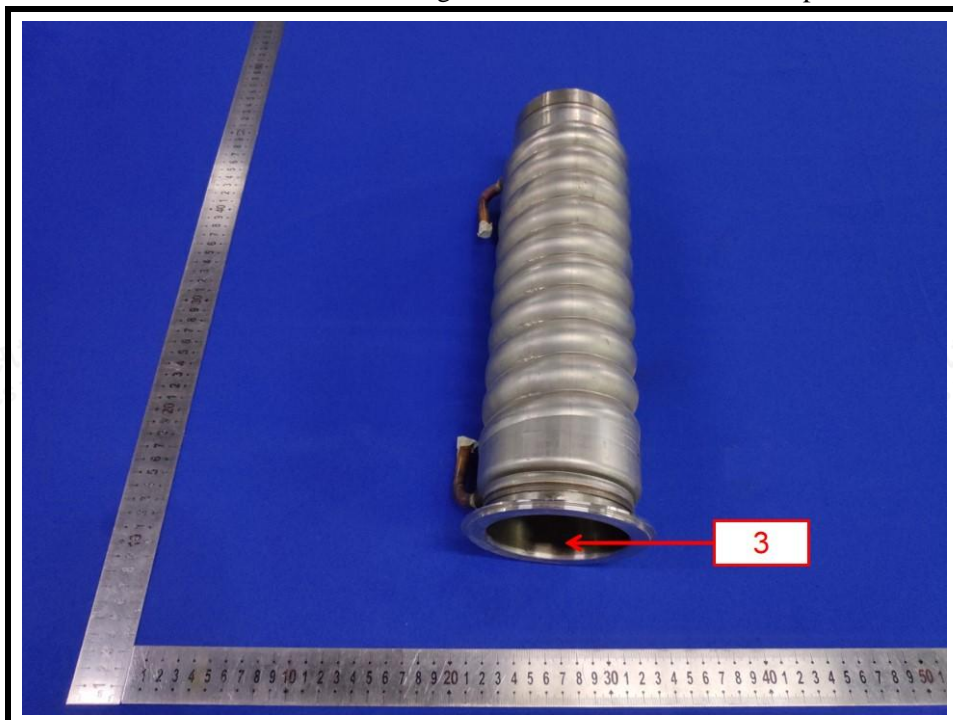
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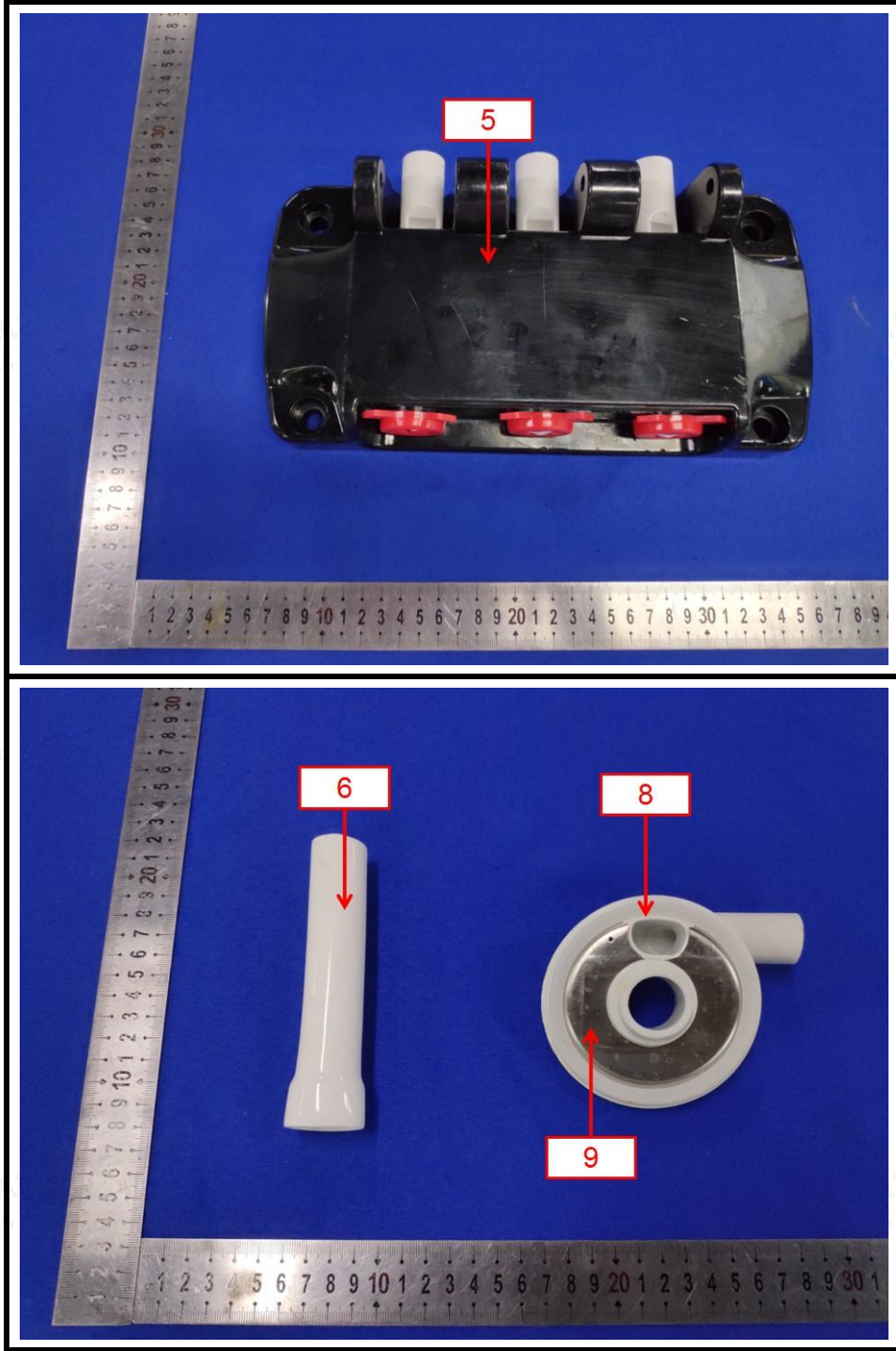


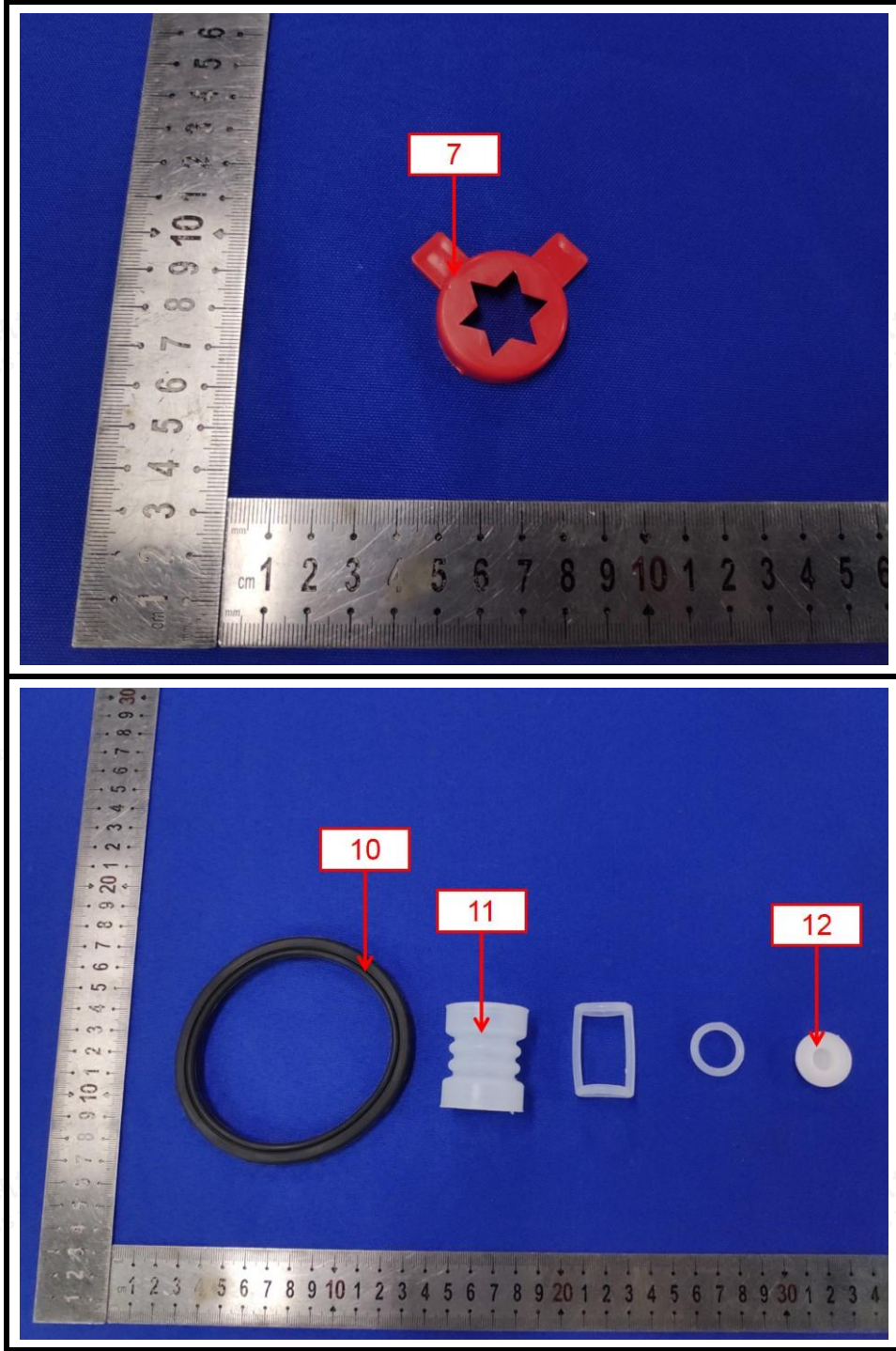
## Photograph of Sample(s)













**Statement:**

- A. The test report is invalid without the signature of the approver and the special seal for the company's report;
- B. The company name, address and sample information shown on the report were provided by the applicant who should be responsible for the authenticity which are not verified by LCS;
- C. The test results in this report are only responsible for the tested samples;
- D. Without written approval of LCS, this report can't be reproduced except in full;
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\*\*\* End of Report \*\*\*

