

Kambukka bvba  
Torenplein 7.16.1, 3500 Hasselt, BELGIUM

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Date: 2015-04-30  
Page 1 of 10

## TEST REPORT

**Test Report No.** : **4322184.55**

**Project No.** : **4322184.00**

Applicant : Kambukka bvba  
Torenplein 7.16.1, 3500 Hasselt, BELGIUM

Product Name : Gizmo Flip

Model No. : 71439

Test Requested : German Food, Articles of Daily Use and Feed Code of September 1, 2005(LFGB), Section 30 & 31 and BfR recommendation and applicant's requirement.

Test Method : Please refer to next pages

Sample Received : 2015-04-18

Testing Period : 2015-04-18 to 2015-04-25

Reference No : CTT150414348EN

Test Results

- following pages -

**Resume:**


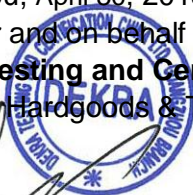
No.	Parameter	Product Name: Gizmo Flip Model No.: 71439
1	Sensorial examination - odour and taste test	PASS
2	Overall migration	PASS
3	Specific migration of heavy metals	PASS
4	Specific migration of Primary Aromatic Amine (PAA)	PASS
5	Peroxide value	PASS
6	Specific migration of Bisphenol A (BPA)	PASS
7	Chromium, zirconium, vanadium, Hafnium contents	PASS
8	Extractable components	PASS
9	Volatile Organic Matter (VOM)	PASS
10	Specific migration of Formaldehyde	PASS
11	Total Platinum	PASS

Guangzhou, April 30, 2015

Signed for and on behalf of

**DEKRA Testing and Certification (Shanghai) Ltd., Guangzhou branch**

Chemical, Hardgoods &amp; Toys

  
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Raymond Yu  
Manager

Attention: Please note that every statement made in this report is only valid for the samples tested and reported herein. This report shall not be reproduced except in full, without the written approval of the testing laboratory.

**Sample Descriptions:**

<b>No.</b>	<b>Description(s)</b>	<b>Materials (claimed by applicant)</b>
(1)	Complete Product	All
(2)	Thread Ring	PP (light green)
(3)	Spout Base	Silicone (transparent)
(4)	Spout Tip	Silicone (transparent)
(5)	Seal - Vent Seal	Silicone (yellow)
(6)	Seal - Main Body Seal	Silicone (black)
(7)	LMS Straw 375	PP (fuschia)
(8)	Valve Housing SA375	PP (grey)
(9-1)	LMS SA375 Valve	HDPE
(9-2)	LMS SA375 Valve	Silicone (transparent)
(10)	Tether	LDPE (yellow)
(11)	Body	PP (fuschia transparent)

## TEST RESULTS

### 1) Sensorial examination - odour and taste test

With reference to DIN 10955:2004.

Test Item	Result	Limit
	(1)	
Sensorial examination odour (point scale)	0	2.5
Sensorial examination taste (point scale)	0	2.5

Remark:

1. Test condition is 22°C at 24 hours for odour test, 70°C 2 hours for taste test.
2. Test media for taste test: Distilled water
3. Number of panelist: Six
4. Scale evaluation:
  - 0 = No perceptible odour/taste
  - 1 = Odour/taste just perceptible (still difficult to define)
  - 2 = Moderate odour/taste
  - 3 = Moderately strong odour/taste
  - 4 = Strong odour/taste

## 2) Overall migration

With reference to EN1186-1:2002 & EN1186-9:2002.

Test simulant	Test condition	Result ( mg/dm <sup>2</sup> )	Limit ( mg/dm <sup>2</sup> )
		(1)	
3%(w/v) Acetic acid	70°C 2 hours	<3	10
50%(v/v) Ethanol	70°C 2 hours	<3	10

Remark:

1. mg/dm<sup>2</sup> = milligram per square decimeter
2. < = Less than

## 3) Specific migration of heavy metals

With reference to (EU) No. 10/2011 for selection of conditions and test method for specific migration. Analysis was performed by inductively coupled plasma optical emission spectrometer & flame atomic absorption spectrophotometer.

Test Item	Test Condition	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		(1)		
Barium (Ba)	3% acetic acid(w/v) 70°C 2 hours	N.D.	0.1	1
Cobalt (Co)		N.D.	0.05	0.05
Copper (Cu)		N.D.	0.5	5
Iron (Fe)		N.D.	1.0	48
Lithium (Li)		N.D.	0.1	0.6
Manganese (Mn)		N.D.	0.1	0.6
Zinc (Zn)		N.D.	1.0	25

Remark:

1. mg/kg = milligram per kilogram
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit

## 4) Specific migration of Primary Aromatic Amine (PAA)

With reference to DIN 55610-1986. Analysis was performed by UV-visible spectrophotometer.

Test Item	Test Condition	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		(1)		
PAA	3% acetic acid(w/v) 70°C 2 hours	N.D.	0.01	0.01

## Remark:

1. mg/kg = milligram per kilogram
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit

### 5) Peroxide value

European Pharmacopoeia. 2005 Appendix X F. Peroxide Value method A

Test Item	Result	Limit
	(1)	
Peroxide value	Absent	Absent

### 6) Specific migration of Bisphenol A (BPA)

With reference to DD CEN/TS 13130-13:2005. Analysis was performed by HPLC.

Test Item	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	(1)		
Specific migration of BPA	N.D.	0.1	0.6

## Remark:

1. mg/kg = milligram per kilogram
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit
4. Test condition is 70°C for 2 hours in 3% acetic acid(w/v)

### 7) Chromium, zirconium, vanadium, Hafnium contents

Acid digestion. Analysis was performed by inductively coupled plasma optical emission spectrometer.

Test Item	Result (mg/kg)						MDL (mg/kg)	Limit (mg/kg)
	(2)	(7)	(8)	(9-1)	(10)	(11)		
Total Chromium (Cr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1	10
Total Zirconium (Zr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5	100
Total Vanadium (V)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2	20
Total Hafnium (Hf)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	10	100

Remark:

1. mg/kg = milligram per kilogram
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit

### 8) Extractable components

 With reference to 61<sup>st</sup> Communication on testing of plastics in Bundesgesundheitsbl 46(2003) 362.

Test Item	Result (%)					Limit (%)
	(3)	(4)	(5)	(6)	(9-2)	
Extractives – Distilled water	<0.10	<0.10	<0.10	<0.10	<0.10	0.5
Extractives - 10% Ethanol(v/v)	<0.10	<0.10	<0.10	<0.10	<0.10	0.5
Extractives - 3% acetic acid(w/v)	<0.10	<0.10	<0.10	<0.10	<0.10	0.5

Remark: 1. Test condition is refluxing for 5 hours.

### 9) Volatile organic matter

LFGB BfR Part II Section X V, May 2003 and LFGB section 35 B80.30 1(EG)

Test Item	Result (%)					Limit (%)
	(3)	(4)	(5)	(6)	(9-2)	
Volatile organic matter	<0.10	<0.10	<0.10	<0.10	<0.10	0.5

Remark: 1. Test condition is 70°C for 2 hours.

### 10) Specific migration of formaldehyde

With reference to (EU) No. 10/2011 &amp; EN 13130-23:2005. Analysis was performed by UV-visible spectrophotometer.

Test Item	Test Condition	Result (µg/mL)					MDL (µg/mL)	Limit (µg/mL)
		(3)	(4)	(5)	(6)	(9-2)		
Formaldehyde	3% acetic acid(w/v) 70°C 2 hours	N.D.	N.D.	N.D.	N.D.	N.D.	1	3

Remark:

1. µg/mL = microgram per milliliter
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit

**11) Total Platinum (Pt)**

With reference to EPA 3052:1996. Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Test Item	Result (mg/kg)					MDL (mg/kg)	Limit (mg/kg)
	(3)	(4)	(5)	(6)	(9-2)		
Platinum (Pt)	N.D.	N.D.	N.D.	N.D.	N.D.	10	50

## Remark:

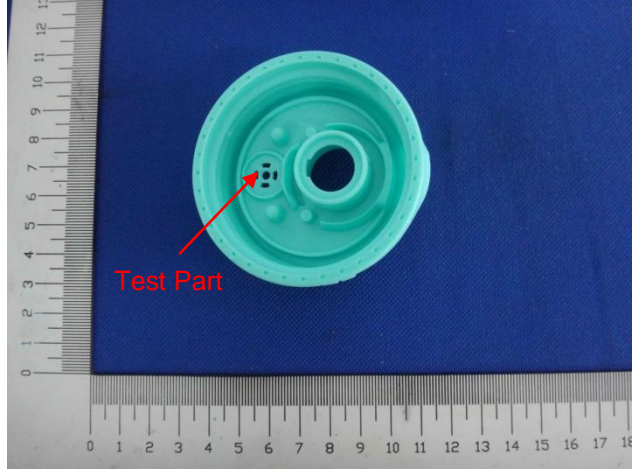
1. mg/kg = milligram per kilogram
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit



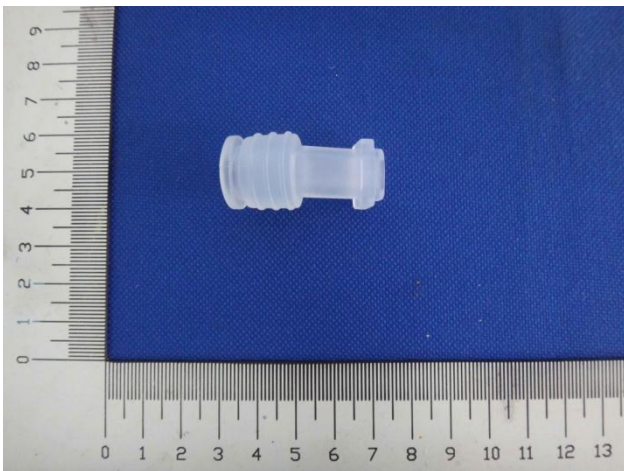
**Sample Photo**



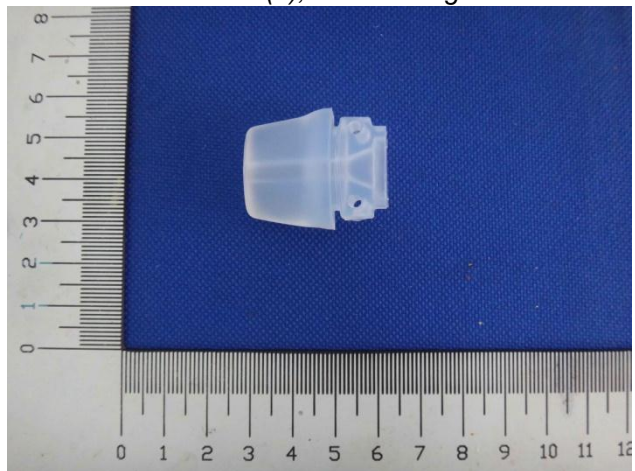
*Picture (1), Finished product*



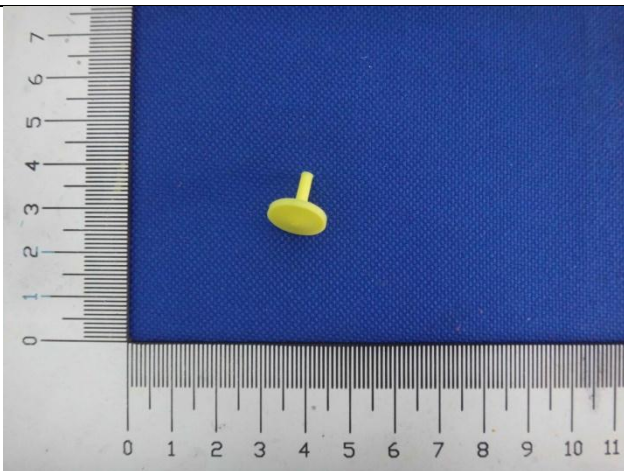
*Picture (2), Thread Ring*



*Picture (3), Spout Base*



*Picture (4), Spout Tip*



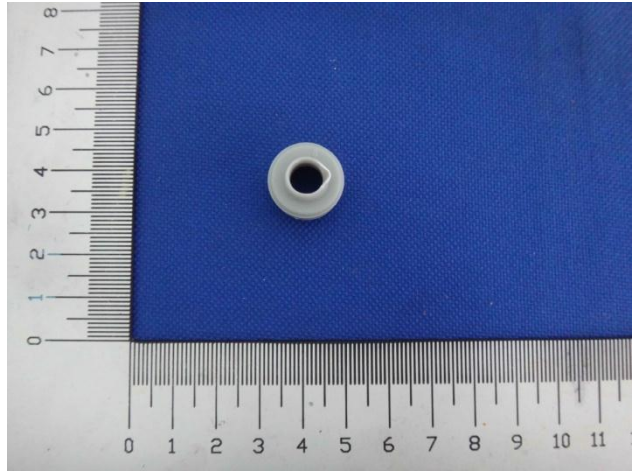
*Picture (5), Seal - Vent Seal*



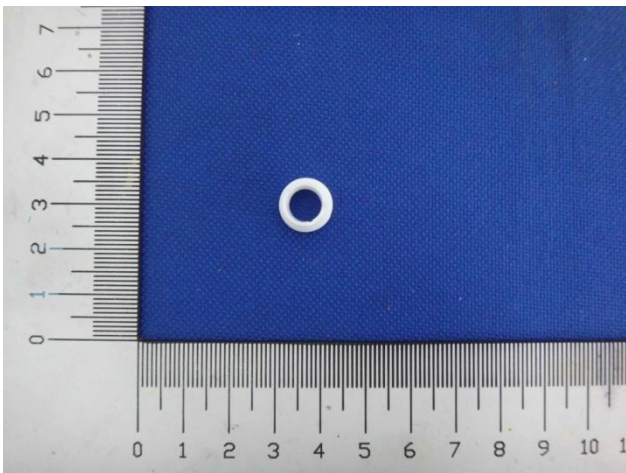
*Picture (6), Seal - Main Body Seal*



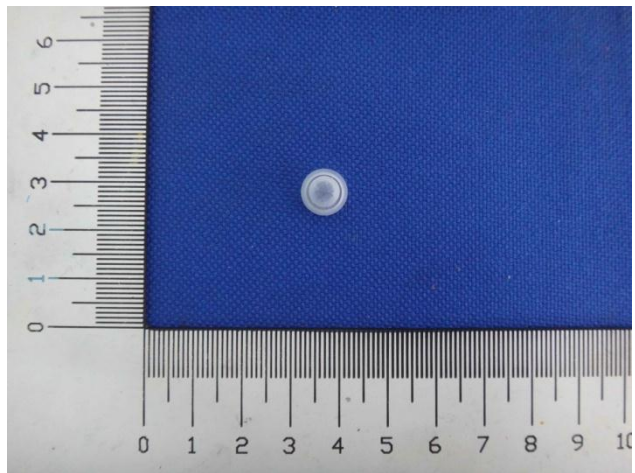
Picture (7), LMS Straw 375



Picture (8), Valve Housing SA375



Picture (9-1), LMS SA375 Valve - HDPE



Picture (9-2), LMS SA375 Valve - Silicone



Picture (10), Tether



Picture (11), Body

---End of Report---