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

Kambukka bvba
Torenplein 7.16.1, 3500 Hasselt, BELGIUM

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Date: 2014-08-22

TEST REPORT

Test Report No.	**:**	**4318508.51**
Project No.	**:**	**4318508.00**

Applicant	:	Kambukka bvba Torenplein 7.16.1, 3500 Hasselt, BELGIUM
Product Name	:	West Loop 2.0
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	:	2014-05-15
Testing Period	:	2014-05-15 to 2014-08-19
Reference No	:	CTT140514354ENR3

Test Results

- following pages -

Resume:

No.	Parameter	Product Name: West Loop 2.0
1	Sensorial examination - odour and taste test	PASS
2	Overall migration	PASS
3	Specific migration of Primary Aromatic Amine (PAA)	PASS
4	Extractable components	PASS
5	Volatile Organic Matter (VOM)	PASS
6	Specific migration of Formaldehyde	PASS
7	Total Platinum	PASS
8	Extractable heavy metals	PASS
9	Specific migration of heavy metals	PASS
10	Chromium, zirconium, vanadium, Hafnium contents	PASS
11	Peroxide value	PASS

Guangzhou, August 22, 2014
Signed for and on behalf of
DEKRA Testing and Certification (Shanghai) Ltd., Guangzhou branch
Toys, Textile, Chemical & Sustainability

Raymond Yu
Manager

Sample Descriptions:

No.	Description(s)	Materials
(1)	Complete product	All
(2)	Outer body - 16oz, button spring, spring - seal arm right, spring - seal arm left	Stainless steel 304
(3)	Lid housing, thread ring	high temp polypropylene (PP) homopolymer
(4)	Main seal, button seal, vent seal	Silicone
(5)	Button	Polyoxymethylene (POM) copolymer
(6)	Spring stop	Polyoxymethylene (POM) copolymer
(7)	Drop down guard, seal arm	Polyoxymethylene (POM) copolymer
(8)	Drink seal	Silicone

TEST RESULTS

1) Sensorial examination - odour and taste test

With reference to DIN 10955:2004.

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

Remark:

1. Test condition is 23℃ at 24 hours for odour test, 100℃ 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 EN 1186-1:2002 & EN 1186-3:2002.

Test simulant	Test condition	Result (mg/dm^2)			Limit (mg/dm^2)
		(1)	(5)*	(7)*	
50%(v/v) Ethanol	100℃ 2 hours	<3.0	<3.0	<3.0	10
3%(w/v) Acetic acid	100℃ 2 hours	<3.0	<3.0	<3.0	10

Remark:

1. mg/dm^2 = milligram per square decimeter
2. < = Less than
3. * = This sample is received on Aug 14, 2014.

3) 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)	(5)*	(7)*		
PAA	3%(w/v) Acetic acid 100℃ 2 hours	N.D.	N.D.	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
4. * = This sample is received on Aug 14, 2014.

4) Extractable components

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

Test Item	Result (%)		Limit (%)
	(4)	(8)	
Extractives - Distilled water	<0.1	<0.1	0.5
Extractives - 10% Ethanol(v/v)	<0.1	<0.1	0.5
Extractives - 3% acetic acid(w/v)	<0.1	<0.1	0.5

Remark:

Test condition is refluxing for 5 hours.

5) Volatile organic matter

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

Test Item	Result (%)		Limit (%)
	(4)	(8)	
Volatile organic matter	<0.1	<0.1	0.5

Remark:

Test condition is 100℃ for 2 hours.

6) Specific migration of formaldehyde

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

Test Item	Test Condition	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
		(5)*	(6)	(7)*		
Formaldehyde	3%(w/v) Acetic acid 100℃ 2 hours	4.5	8.6	4.7	1	15

Test Item	Test Condition	Result (μg/mL)		MDL (μg/mL)	Limit (μg/mL)
		(4)	(8)		
Formaldehyde	3%(w/v) Acetic acid 100℃ 2 hours	N.D.	N.D.	1	3

Remark:

1. mg/kg = milligram per kilogram
2. μg/mL = microgram per milliliter
3. N.D. = Not Detected (below MDL)
4. MDL = Method Detection Limit
5. * = This sample is received on Aug 14, 2014.

7) 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)
	(4)	(8)		
Platinum (Pt)	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

8) Extractable heavy metals

Sample preparation in 3%(w/v) acetic acid at 100℃ for 2 hours. Analysis was performed by inductively coupled plasma optical emission spectrometer & flame atomic absorption spectrophotometer.

Test Item	Result (mg/dm^2)	MDL (mg/dm^2)	Recommended Limit(mg/dm^2)
	(2)		
Extractable lead (Pb)	N.D.	0.005	0.01
Extractable cadmium(Cd)	N.D.	0.005	0.005
Extractable chromium (Cr)	N.D.	0.01	0.4
Extractable nickel (Ni)	0.02	0.01	0.1
Extractable copper (Cu)	N.D.	0.01	0.5
Extractable cobalt (Co)	N.D.	0.01	Not Detectable
Extractable stibium (Sb)	N.D.	0.005	Not Detectable

Remark:
1. mg/dm^2 = milligram per square decimeter
2. N.D. = Not Detected (below MDL)
3. MDL = Method Detection Limit

9) 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	Limit
		(1)	(5)*	(7)*	(mg/kg)	(mg/kg)
Barium (Ba)	3%(w/v) Acetic acid 100℃ 2 hours	N.D.	N.D.	N.D.	0.1	1
Cobalt (Co)		N.D.	N.D.	N.D.	0.05	0.05
Copper (Cu)		N.D.	N.D.	N.D.	0.5	5
Iron (Fe)		N.D.	N.D.	N.D.	1.0	48
Lithium (Li)		N.D.	N.D.	N.D.	0.1	0.6
Manganese (Mn)		N.D.	N.D.	N.D.	0.1	0.6
Zinc (Zn)		N.D.	N.D.	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. * = This sample is received on Aug 14, 2014.

10) 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)
	(3)		
Total Chromium (Cr)	N.D.	1	10
Total Zirconium (Zr)	N.D.	5	100
Total Vanadium (V)	N.D.	2	20
Total Hafnium (Hf)	N.D.	10	--

Remark:

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

11) Peroxide value

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

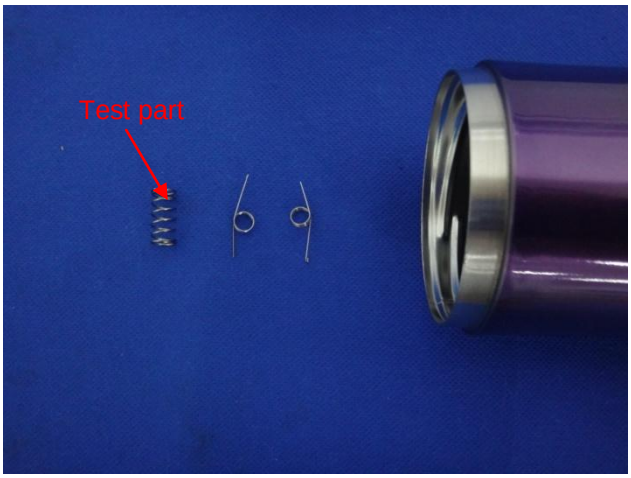
Test Item	Result		Limit
	(5)*	(7)*	
Peroxide value	Absent	Absent	Absent

Remark:

* = This sample is received on Aug 14, 2014.

Sample photo

Picture (1), Complete Product



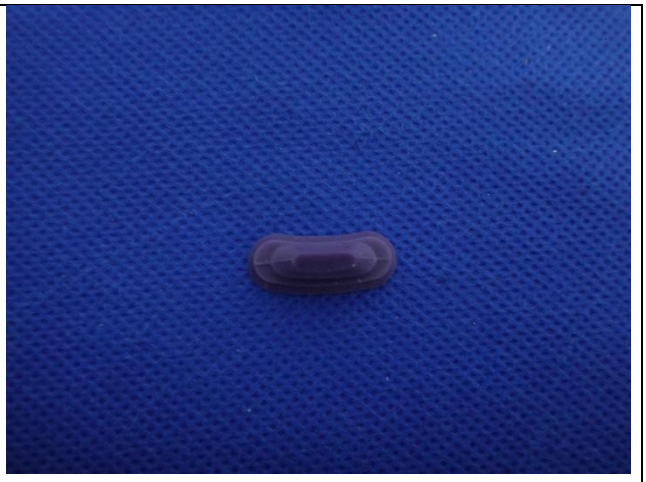
Picture (2), Button spring, spring - seal arm right, spring - seal arm left, outer body - 16oz

Picture (3), Lid housing, thread ring

Picture (4), Main seal, button seal, vent seal

Picture (5), Button

Picture (6), Spring stop

	
Picture (7), Drop down guard, seal arm	*Picture (8), Drink seal*

---End of Report---