

TEST REPORT

<u>APPLICANT</u>	: Koopman International B.V.
<u>ADDRESS</u>	: Distelweg 88 1031 HH Amsterdam
<u>SAMPLE DESCRIPTION</u>	: Funnel
<u>MODEL NO.</u>	: 179640010
<u>SAMPLE RECEIVED DATE</u>	: 12-Dec-2013
<u>TURN AROUND TIME</u>	: 12-Dec-2013 To 18-Dec-2013, 5 working days
<u>TEST REQUESTED</u>	: Selected test(s) as requested by client
<u>TEST METHOD</u>	: Please refer to next page(s).
<u>TEST RESULT</u>	: Please refer to next page(s).
<u>CONCLUSION</u>	: Pass

Note: The test(s) requirements as requested by client

Eurofins (Shanghai) contact information

Customer service: FloraZhuang@eurofins.com / 021-61819120 / 13761635324

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd



Chris Zhang
Lab Manager

SAMPLE PHOTO



EFSH13120620-CG-01

TO BE CONTINUED

COMPONENT LIST

Component No.	Component
1	Grey PP
2	White PP

TO BE CONTINUED

TEST RESULT

1. Sensorial examination odour and taste test

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.
 Sensorial examination odour and taste test

Test Method : Robinson's test with reference to DIN 10955:1983 (2004)
 Odour test condition: 70°C 0.5hour
 Taste test condition: 70°C 0.5hour
 Test media: Distilled water
 No. of panelist: 5

Test Item(s)	Limit	Result	
		1	2
Sensorial examination odour (Point scale)	2.5	0.0	0.0
Sensorial examination taste (Point scale)	2.5	0.0	0.0

Scale evaluation:

- 0: No perceptible odour
- 1: Odour just perceptible (still difficult to define)
- 2: Moderate odour
- 3: Moderately strong odour
- 4: Strong odour

2. Overall migration

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.
 For material: PP -Overall migration test

Test Method : With reference to EN 1186-1:2002 for selection of conditions and test methods;
 or EN1186-3:2002 aqueous food simulants by total immersion method;
 or EN1186-9:2002 aqueous food simulants by article filling method;
 or EN1186-2:2002 olive oil by total immersion method;
 or EN1186-8:2002 olive oil by article filling method;
 or EN 1186-14:2002 substitute test

Simulant used	Time	Temperature	Max. Permissible Limit	Result (mg/dm ²)	
				1	2
3% Acetic Acid	0.5hr	70°C	10 mg/dm ²	<3.0	<3.0
20% Ethanol	0.5hr	70°C	10 mg/dm ²	<3.0	<3.0

Note:

- (1) Analytical tolerance of aqueous simulants is 1 mg/dm²
- (2) Analytical tolerance of fatty food simulants is 3 mg/dm²
- (3) Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

3. Specific Migration of Heavy Metal

Test Requested : To determine the Specific Migration of Heavy Metal for compliance with European Commission Regulation (EU) No 10/2011 and its amendment (EU) No 1282/2011 on plastic materials and articles intended to come into contact with food.

Test Method : With reference to EU 10/2011 for selection of test method; analysis was performed by ICP-OES.

Simulant used: 3% Acetic Acid (W/V) Aqueous Solution.

Test condition: 70°C 0.5hour

Test Item(s)	Max. Permissible limit	Unit	MDL	Test Result	
				1	2
Barium	1	mg/kg	0.25	ND	ND
Cobalt	0.05	mg/kg	0.05	ND	ND
Copper	5	mg/kg	0.25	ND	ND
Iron	48	mg/kg	0.25	ND	ND
Lithium	0.6	mg/kg	0.5	ND	ND
Manganese	0.6	mg/kg	0.25	ND	ND
Zinc	25	mg/kg	0.5	ND	ND

Note:

- (1) mg/kg = milligram per kilogram
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected(<MDL)
- (4) Test condition & simulant were specified by client.

4. Cadmium and Lead Content

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Council of Europe Resolution AP (2004) 4 and BfR recommendation, European Commission Directive 93/11/EEC.

Test Method : Acid digestion, followed by analysis using ICP-OES.

Test Item(s)	Limit	Unit	MDL	Test Result	
				1	2
Total Lead content	100	mg/kg	10	ND	ND
Total Cadmium content	100	mg/kg	5	ND	ND

Note:

ND = not detected, less than MDL
MDL = method detection limit

TO BE CONTINUED

TEST RESULT

5. Specific Migration of Phthalates

Test Requested : To determine the Specific Migration of Phthalates for compliance with European Commission Regulation (EU) No 10/2011 and its amendment (EU) No 1282/2011 relating to plastic materials and articles intended to come into contact with foodstuffs

Test Method : Sample preparation with reference to EN 13130-1: 2004 with selection of simulant and condition, followed by analysis by GC-MS

Simulant used : 95% Ethanol (V/V) Aqueous Solution

Test condition : 60°C 0.5hour

Test Item(s)	CAS No.	Max. Permissible Limit	Unit	MDL	Specific Migration	
					1	2
Benzylbutyl Phthalate(BBP)	85-68-7	30	mg/kg	0.25	ND	ND
Dibutyl Phthalate(DBP)	84-74-2	0.3	mg/kg	0.05	ND	ND
Di (2-ethylhexyl) Phthalate(DEHP)	117-81-7	1.5	mg/kg	0.25	ND	ND
Sum of (DINP+ DIDP)	-	9	mg/kg	2.00	ND	ND
Diallyl phthalate(DAP)	131-17-9	ND	mg/kg	0.01	ND	ND

Note:

- (1) Test condition & simulant were specified by client.
- (2) 1mg/kg=1ppm=0.0001%
- (3) ND = Not detected
- (4) MDL = Method Detection Limit

6. Specific migration test of aromatic amine

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.

Test Method : Sample preparation with reference to EN 1186-1,-9:2002, followed by analysis with reference to DIN 55610:1986.

Simulant used : 3% Acetic Acid

Test condition : 70°C 0.5hour

Test Item(s)	Max. Permissible Limit	Unit	MDL	Specific Migration	
				1	2
Specific migration of aromatic amine	Absent	mg/kg	0.01	Absent	Absent

Note:

- (1) Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

7. Chromium, Vanadium, Zirconium and Hafnium Content

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.

Test Method : With reference to EPA3051A:2007 and DIN EN ISO 11885: 2009, acid digestion, followed by analysis using ICP-OES.

Test Item(s)	Limit	Unit	MDL	Result	
				1	2
Total Chromium	10	mg/kg	5	ND	ND
Total Vanadium	20	mg/kg	20	ND	ND
Total Zirconium	100	mg/kg	20	ND	ND
Total Hafnium	100	mg/kg	20	ND	ND

Note:

ND = not detected, less than MDL

MDL = method detection limit

TO BE CONTINUED

TEST RESULT

8. Polycyclic Aromatic Hydrocarbons (PAHs)

- Test specification : 18 Polycyclic Aromatic Hydrocarbons in polymers (PAHs) (defined in US EPA Method 610, and also Based on the document ZEK 01.4-08)
- Test method : Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to ZEK 01.4-08
- Client's Requirement : Category 1 (for foodcontact materials):
 Sum of 18 PAH: 0.2mg/kg
 Benzo(a)pyrene: 0.2mg/kg

Parameter	CAS No.	Unit	Result	
			1	2
Group PAHs	--	mg/kg	ND	ND
Acenaphthene	83-32-9	mg/kg	ND	ND
Acenaphthylene	208-96-8	mg/kg	ND	ND
Anthracene	120-12-7	mg/kg	ND	ND
Benz(a)anthracene	56-55-3	mg/kg	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	ND	ND
Benzo(ghi)perylene	191-24-2	mg/kg	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	ND	ND
Chrysene	218-01-9	mg/kg	ND	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	ND	ND
Fluoranthene	206-44-0	mg/kg	ND	ND
Fluorene	86-73-7	mg/kg	ND	ND
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND	ND
Naphthalene	91-20-3	mg/kg	ND	ND
Phenanthrene	1985-1-8	mg/kg	ND	ND
Pyrene	129-00-0	mg/kg	ND	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	ND	ND
Summary to above mentioned requirement:	For Category 1		Pass	Pass

Note:

mg/kg = milligram per kilogram

ND=not detected, less than 0.1 mg/kg

*** END OF THE REPORT ***