

Test Report

Number: SHAH01754798

Applicant: PF CONCEPT INTERNATIONAL COOPERATIEF U.A
KABELWEG 1
2371 DX ROELOFARENDSEVEEN
THE NETHERLANDS
Attn: Jasmine Gu/Sonia HE

Date: 19 Nov, 2024

Sample Description:

Item Name : Titan 350 ml RCS certified
Item No. : 10084901-WH, 10084981-SL, 10084990-BK
Vendor : #11104/#13756
Goods Exported To : Europe
Country Of Origin : China
P.O. No. : PO#666123
Date Sample Received : 01 Nov, 2024
Testing Period : 01 Nov, 2024 To 19 Nov, 2024

Tests Conducted:

As requested by the applicant, for details refer to attached page(s).

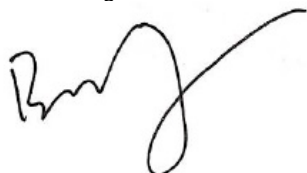
Conclusion:

Tested Sample	Standard	Result
Tested Components of Submitted Sample	European Commission Regulation (EU) No. 10/2011, Amendment No. 2020/1245 and other Amendments and Regulation (EC) No. 1935/2004 - Overall migration	Pass
	Resolution ResAP(2004)5 on silicones used for food contact applications on overall migration .	Pass
	Dutch Commodities Act on Packagings and Consumer Articles Regulation (Warenwetregeling verpakkingen en gebruiksartikelen) Annex A Chapter VI on overall migration	Pass
	European Resolution CM/Res(2020)9 and the supplementary Technical Guide on metals and alloys used in food contact materials and articles(EDQM 2nd Edition, 2024) on specific migration of heavy metal	See comment
	Resolution ResAP(2004)4 on Nitrosamines & Nitrosatable substances in rubber	Pass

To be continued

Authorized By:

For Intertek Testing Services Ltd., Shanghai



Bill Zhang
General Manager



Test Report

Number: SHAH01754798

<u>Tested Sample</u>	<u>Standard</u>	<u>Result</u>
Tested Component of Submitted Sample	German Food, Commodities and Feed Code (LFGB) and BFR Recommendation XV requirement for Volatile Organic Matter content on silicone rubber	Pass
	German Food, Commodities and Feed Code (LFGB) and BFR Recommendation XV requirement on extractable substances in silicone rubber	Pass
	European commission regulation No. 10/2011 annex I, amendment No. 2020/1245 and other amendments and Regulation (EC) No 1935/2004 - Specific migration of Bisphenol A	Pass
	European Commission Regulation (EU) No 10/2011 Annex II and Amendment (EU) 2016/1416 and (EU) 2017/752 and (EU) 2020/1245 and Regulation (EC) No 1935/2004 on specific migration of heavy metal content	Pass
	European Commission Regulation (EU) No. 10/2011 Annex I, Amendment (EU) 2020/1245, Amendment (EU) 2023/1442 and other Amendments and Regulation (EC) No 1935/2004 on specific migration of Phthalate	Pass
	European Commission Regulation No. 10/2011 Annex I and II and Amendment No. 2020/1245 and Regulation (EC) No 1935/2004 on specific migration of Primary Aromatic Amines	Pass
	AfPS GS 2019:01 PAK (PAH) on Polycyclic Aromatic Hydrocarbons (PAHs) content	Pass
	Sensory Evaluation	Pass
	European Commission Regulation (EU) No. 10/2011 Annex I, Amendment (EU) 2023/1442 and Regulation (EC) No 1935/2004 on Phthalate content.	Pass
	Applicant's requirement on Bisphenol-A content	Pass
	European Council Directive 84/500/EEC and Commission Directive 2005/31/EC on leachable lead and cadmium released from ceramic article intended to come into contact with foodstuff	Pass
	Dutch Commodities Act on Packagings and Consumer Articles Regulation (Warenwetregeling verpakkingen en gebruiksartikelen) Annex A Chapter VI requirement for specific migration of heavy metals content on ceramic ware	Pass

To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai



Bill Zhang
General Manager



Test Report

Number: SHAH01754798

<u>Tested Sample</u>	<u>Standard</u>	<u>Result</u>
Tested Components of Submitted Samples	Cadmium content requirement in Commission Regulation (EU) No. 494/2011 of 20 May 2011, (EU) No. 835/2012 of 18 September 2012 and (EU) No. 2016/217 of 16 February 2016 Amending Annex XVII entry 23 of the REACH Regulation (EC) No. 1907/2006	Pass
	Lead content requirement in Commission Regulation (EU) 2015/628 of 22 April 2015 Amending Annex XVII Entry 63 of the REACH Regulation (EC) No. 1907/2006	Pass
	Octamethylcyclotetrasiloxane (D4), Decamethylcyclopentasiloxane (D5) and Dodecamethylcyclohexasiloxane (D6) contents (SVHC substance)	Pass
	Tris (2-Chloroethyl) Phosphate (TCEP) content (SVHC substance)	Pass
	Phthalate contents (SVHC substance)	Pass
	Phthalates content requirement in Annex XVII Entry 51&52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 & Amendment Commission Regulation (EU) 2018/2005	Pass
	Short-Chain Chlorinated Paraffins (C10~C13)(SCCPs) requirement in Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)	Pass
	Cobalt dichloride, Cobalt (II) carbonate, Cobalt (II) diacetate, Cobalt (II) dinitrate and Cobalt (II) sulphate content (SVHC substance)	Pass
	Disodium tetraborate, anhydrous, Tetraboron disodium heptoxide, hydrate and Diboron trioxide content (SVHC substance)	Pass
	European Directive 94/62/EC and Amendments 2004/12/EC & 2005/20/EC & 2013/2/EU on packaging and packaging waste for Toxic Elements Test	Pass
	Dibutylbis(pentane-2,4-dionato-O,O')tin content (SVHC substance)	Pass

To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai



Bill Zhang
General Manager



Test Report

Number: SHAH01754798

<u>Tested Sample</u>	<u>Standard</u>	<u>Result</u>
Tested component of submitted sample	2-methylimidazole content (SVHC substance)	Pass

Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) content (SVHC substance)	Pass
---	------

Comment: The testing scope of the following standard was not applicable to the submitted component. However, the test results of the component met/did not meet the related requirements as stated in this report.

To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai



Bill Zhang
General Manager



Test Report

Number: SHAH01754798

Tests Conducted

1 Overall Migration Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and its amendments on plastic materials and articles intended to come into contact with food.

I. Test Condition:

Test No.	Time and Temperature
OM3	2 hours at 70 °C

II. Test Results:

Tested Component	Result in mg/dm ²					
	3% (w/v) Acetic Acid			50%(v/v) Ethanol		
	1 st	2 nd	3 rd	1 st	2 nd	3 rd
(5)	<3	<3	<3	<3	<3	<3
(6)	<3	<3	<3	<3	<3	<3
Limit in mg/dm ²	10			10		

Requirement:

Result of 3rd migration < OML, and

Result of 1st migration ≥ 2nd migration ≥ 3rd migration after consideration of result uncertainty.

Ratio of food contact surface area to volume of component (5) & (6) used to establish the compliance of material or article = 1 dm² : 100 mL.

Remark: As per client's request, the above condition and food simulant were used for the test.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

2 Overall Migration Test for Silicones Food Contacting Materials/Articles

With reference to EU JRC Guideline of testing conditions for kitchenware articles in contact with foodstuffs: plastics, metals, silicon & rubber, and (EU) No 10/2011 and its amendment.

I. Test Condition:

Test No.	Time and Temperature
OM3	2 hours at 70 °C

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

II .Test Results:

Tested Component	Result in mg/kg	
	3% (w/v) acetic acid	50% (v/v) ethanol
(7)	<10	<10
Limit in mg/kg	60	60

Ratio of food contact surface area to volume of component (7) used to establish the compliance of material or article = 0.1 dm² : 350 mL.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

3 Overall Migration

As per Dutch Commodities Act on Packagings and Consumer Articles Regulation (Warenwetregeling verpakkingen en gebruiksartikelen) Annex B chapter 4 and Commission Regulation (EU) No. 10/2011.

I. Test condition:

Tested Component	Food Simulant	Time (hour)	Temperature (°C)
(3)	3% (w/v) Acetic acid	2	70
(4)	3% (w/v) Acetic acid	2	70

II. Test result:

Food Simulant	Result (mg/kg)						Limit (mg/kg)
	(3)			(4)			
	1 st	2 nd	3 rd	1 st	2 nd	3 rd	
3% (w/v) Acetic acid	ND	ND	ND	ND	ND	ND	60

Requirement:

Result of 3rd migration < OML, and

Result of 1st migration ≥ 2nd migration ≥ 3rd migration after consideration of result uncertainty.

Remark: ND = Not detected

Reporting Limit = 10mg/kg

As per client's request, the above condition and food simulant were used for the test.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

To be continued

Test Report

Number: SHAH01754798

Tests Conducted

4 Specific Migration of Heavy Metal on Metals and Alloys Used in Food Contact Materials and Articles

With reference to EU Resolution CM/Res(2020)9 and the supplementary Technical Guide on metals and alloys used in food contact materials and articles(EDQM 2nd Edition,2024) and JRC guideline 2021, migration test was conducted and heavy metal content were determined by Inductively Coupled Plasma Mass Spectrometer (ICP-MS) with reference to ISO 17294-2: 2016.

I. Test Condition:

Food Simulant: Citric acid (5 g/L)

Temperature: Hot fill Time: 24 hours

II. Test Result:

Test Item	Result (1 st test) (mg/kg)	Result (2 nd test) (mg/kg)	Result (1 st test) + Result (2 nd test) (mg/kg) (3)	7*Limit (mg/kg)	Result (3 rd test) (mg/kg) (3)	Limit (mg/kg)
Silver (Ag)	<0.01	<0.01	<0.01	0.56	<0.01	0.08
Aluminium (Al)	<1	<1	<1	35	<1	5
Chromium (III) (Cr III)^	<0.05	<0.05	<0.05	7	<0.05	1
Cobalt (Co)	<0.004	<0.004	<0.004	0.14	<0.004	0.02
Copper (Cu)	<0.5	<0.5	<0.5	28	<0.5	4
Iron (Fe)	<1	<1	<1	280	<1	40
Manganese (Mn)	<0.1	<0.1	<0.1	3.85	<0.1	0.55
Molybdenum(Mo)	<0.02	<0.02	<0.02	0.84	<0.02	0.12
Nickel (Ni)	<0.02	<0.02	<0.02	0.98	<0.02	0.14
Tin (Sn)	<10	<10	<10	700	<10	100
Vanadium (V)	<0.002	<0.002	<0.002	0.07	<0.002	0.01
Zinc (Zn)	<1	<1	<1	35	<1	5
Zirconium (Zr)	<1	<1	<1	14	<1	2
Antimony (Sb)	<0.005	<0.005	<0.005	0.28	<0.005	0.04
Arsenic (As)	<0.0004	<0.0004	<0.0004	0.014	<0.0004	0.002
Barium (Ba)	<0.1	<0.1	<0.1	8.4	<0.1	1.2
Beryllium (Be)	<0.002	<0.002	<0.002	0.07	<0.002	0.01
Cadmium (Cd)	<0.001	<0.001	<0.001	0.035	<0.001	0.005
Lead (Pb)	<0.002	<0.002	<0.002	0.070	<0.002	0.010
Lithium (Li)	<0.005	<0.005	<0.005	0.336	<0.005	0.048
Mercury (Hg)	<0.0005	<0.0005	<0.0005	0.021	<0.0005	0.003
Thallium (Tl)	<0.00002	<0.00002	<0.00002	0.007	<0.00002	0.001
Magnesium (Mg)	<5	<5	<5	--	<5	--
Titanium (Ti)	<0.1	<0.1	<0.1	--	<0.1	--

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Test Item	Result (1 st test) (mg/kg)	Result (2 nd test) (mg/kg)	Result (1 st test) + Result (2 nd test) (mg/kg)	7*Limit (mg/kg)	Result (3 rd test) (mg/kg)	Limit (mg/kg)
			(4)		(4)	
Silver (Ag)	<0.01	<0.01	<0.01	0.56	<0.01	0.08
Aluminium (Al)	<1	<1	<1	35	<1	5
Chromium (III) (Cr III) [^]	<0.05	<0.05	<0.05	7	<0.05	1
Cobalt (Co)	<0.004	<0.004	<0.004	0.14	<0.004	0.02
Copper (Cu)	<0.5	<0.5	<0.5	28	<0.5	4
Iron (Fe)	<1	<1	<1	280	<1	40
Manganese (Mn)	<0.1	<0.1	<0.1	3.85	<0.1	0.55
Molybdenum (Mo)	<0.02	<0.02	<0.02	0.84	<0.02	0.12
Nickel (Ni)	<0.02	<0.02	<0.02	0.98	<0.02	0.14
Tin (Sn)	<10	<10	<10	700	<10	100
Vanadium (V)	<0.002	<0.002	<0.002	0.07	<0.002	0.01
Zinc (Zn)	<1	<1	<1	35	<1	5
Zirconium (Zr)	<1	<1	<1	14	<1	2
Antimony (Sb)	<0.005	<0.005	<0.005	0.28	<0.005	0.04
Arsenic (As)	<0.0004	<0.0004	<0.0004	0.014	<0.0004	0.002
Barium (Ba)	<0.1	<0.1	<0.1	8.4	<0.1	1.2
Beryllium (Be)	<0.002	<0.002	<0.002	0.07	<0.002	0.01
Cadmium (Cd)	<0.001	<0.001	<0.001	0.035	<0.001	0.005
Lead (Pb)	<0.002	<0.002	<0.002	0.070	<0.002	0.010
Lithium (Li)	<0.005	<0.005	<0.005	0.336	<0.005	0.048
Mercury (Hg)	<0.0005	<0.0005	<0.0005	0.021	<0.0005	0.003
Thallium (Tl)	<0.00002	<0.00002	<0.00002	0.007	<0.00002	0.001
Magnesium (Mg)	<5	<5	<5	--	<5	--
Titanium (Ti)	<0.1	<0.1	<0.1	--	<0.1	--

Remark: [^] = Chromium (III) content was derived from migration results of total Chromium.

The submitted sample/component is a repeated use article. The migration test was carried out three times on the same article. The sum of the results of the first and second tests should not exceed seven times the limit (Result 1st test + Result 2nd test < 7 * limit) and the Result 3rd test shouldn't exceed the limit.

As per client's request, the above condition and food simulant were used for the test.

Tested Component: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

5 Specific Migration of N-nitrosamines and N-nitrosatable Substances

With reference to EU JRC Guideline of testing conditions for kitchenware articles in contact with foodstuffs: plastics, metals, silicon & rubber, (EU) No 10/2011 and its amendments.

I. Test Condition:

<u>Food Simulant</u>	<u>Time</u>	<u>Temperature</u>
50% (v/v) ethanol	24 hours	hot fill

II. Test Result:

<u>Test Item</u>	<u>Result (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>	<u>Requirement (mg/kg)</u>
	(7)		
N-nitrosamines	ND	0.01	ND
N-nitrosatable substances	ND	0.1	ND

Remark: ND = Not Detected (Less than detection limit)

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

6 Volatile Organic Matter of Silicone Rubber

As per BFR Recommendation XV.

I. Test Condition:

Temperature: 200 °C Time: 4 hours

II. Test Result:

<u>Test Item</u>	<u>Result (% w/w)</u>	<u>Reporting Limit (% w/w)</u>	<u>Requirement (% w/w) (Max.)</u>
	(7)		
Volatile Organic Matter (VOM)	0.10	0.1	0.5

The cut sample was conditioned at 100 °C for 1 hour to remove sorbed water before treatment at 200 °C for 4 hours.

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

7 Extractable Substances of Silicone Rubber

As per BFR Recommendation XV.

I) Test Condition: Reflux for 5 hours

II) Test Result:

Food Simulant	Result (%)	Reporting Limit	Limit (%)
	(7)	(%)	
3% (w/v) Acetic Acid	ND	0.1	0.5
10% (v/v) Ethanol	ND	0.1	0.5
Water	ND	0.1	0.5

Remark: ND = Not detected (Less than the reporting limit)

Tested Component : See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

8 Specific Migration of Bisphenol A for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/2011 and its amendments (including amendment No. 2018/213 and amendment No. 2020/1245) on plastic materials and articles intended to come into contact with food. And followed by Liquid Chromatography-Mass Spectrometry (LC-MS) analysis.

I. Test Condition:

Food simulant: 3% (w/v) acetic acid

Temperature: hot fill Time: 24 hours

II. Test Results of Bisphenol A (CAS No. 80-05-7):

Tested Component	Result in mg/kg		
	3% (w/v) acetic acid		
	1 st	2 nd	3 rd
(5)	ND	ND	ND
(6)	ND	ND	ND
Limit in mg/kg	0.05		

Requirement:

Result of 3rd migration < SML, and

Result of 1st migration $\geq$ 2nd migration $\geq$ 3rd migration after consideration of result uncertainty.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Ratio of food contact surface area to volume of component (5) (6) used to establish the compliance of material or article = 0.6 dm² : 100 mL.

Remark: Report limit=0.01mg/kg
ND=Not detected (less than report limit)

As per client's request, the above condition and food stimulant were used for the test.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024
Testing Period: Oct.31, 2024 To Nov.18, 2024

9 **Specific Migration of Heavy Metal**

As per Commission Regulation (EU) No.10/2011 and its amendments.

I. Test Condition:
Food Simulant: 3% (w/v) Acetic acid
Temperature: hot fill Time: 24 hours

II. Test Result:

Test Component : (5) & (6)					
Element	Result (mg/kg)			Detection Limit (mg/kg)	Limit (mg/kg)
	1 st migration	2 nd migration	3 rd migration		
Aluminum (Al)	ND	ND	ND	0.1	1
Antimony (Sb)	ND	ND	ND	0.01	0.04
Arsenic (As)	ND	ND	ND	0.01	ND
Barium (Ba)	ND	ND	ND	0.1	1
Cadmium (Cd)	ND	ND	ND	0.002	ND
Chromium (Cr)	ND	ND	ND	0.01	ND
Cobalt (Co)	ND	ND	ND	0.03	0.05
Copper (Cu)	ND	ND	ND	1	5
Iron (Fe)	ND	ND	ND	5	48
Lead (Pb)	ND	ND	ND	0.01	ND
Lithium (Li)	ND	ND	ND	0.1	0.6
Manganese (Mn)	ND	ND	ND	0.1	0.6
Mercury (Hg)	ND	ND	ND	0.01	ND
Nickel (Ni)	ND	ND	ND	0.01	0.02
Zinc (Zn)	ND	ND	ND	1	5
Europium (Eu)	ND	ND	ND	0.01	0.05
Gadolinium (Gd)	ND	ND	ND	0.01	0.05
Lanthanum (La)	ND	ND	ND	0.01	0.05
Terbium (Tb)	ND	ND	ND	0.01	0.05
Sum of (Eu, Gd, La, Tb)	ND	ND	ND	0.04	0.05

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Requirement:

Result of 3rd migration < SML, and

Result of 1st migration $\geq$ 2nd migration $\geq$ 3rd migration after consideration of result uncertainty.

Result of 1st, 2nd and 3rd migration < SML when SML limit is Not Detected (ND)

Ratio of food contact surface area to volume of component (5) (6) used to establish the compliance of material or article = 0.6 dm² : 100 mL.

Remark: ND = Not detected(Less than detection limit)

As per client's request, the above condition and food simulant were used for the test.

Tested Component(s) : See component list in last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

10 Specific Migration of Phthalates Test for Plastic Food Contacting Materials/Articles

As per Commission Regulation (EU) No. 10/ 2011 of 14 January 2011 and its amendments on plastic materials and articles intended to come into contact with food.

I. Test Condition:

<u>Food Simulant</u>	<u>Time and Temperature</u>
50% (v/v) Ethanol	24 hours at hot fill

II. Test Results:

Butyl Benzy Phthalate (BBP)(CAS No.85-68-7)

<u>Tested Component</u>	<u>Result in mg/kg</u>		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	<1	<1	<1
(6)	<1	<1	<1
Limit in mg/kg	6		

Bis (2-Ethylhexyl) Phthalate (DEHP)(CAS No.117-81-7)

<u>Tested Component</u>	<u>Result in mg/kg</u>		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	<0.5	<0.5	<0.5
(6)	<0.5	<0.5	<0.5
Limit in mg/kg	0.6		

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Dibutyl Phthalate (DBP) (CAS No.87-74-2)

Tested Component	Result in mg/kg		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	<0.1	<0.1	<0.1
(6)	<0.1	<0.1	<0.1
Limit in mg/kg	0.12		

Di-(Iso-Nonyl) Phthalate (DINP)(CAS No. 84-74-2) and Di-(Iso-Decyl) Phthalate (DIDP)(CAS No.26761-40-0)

Tested Component	Result in mg/kg		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	<1	<1	<1
(6)	<1	<1	<1
Limit in mg/kg	1.8		

Dially Phthalate (DAP)(CAS No. 131-17-9)

Tested Component	Result in mg/kg		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	ND	ND	ND
(6)	ND	ND	ND
Limit in mg/kg	ND		

Sum of DBP, DIBP, BBP and DEHP (Expressed as DEHP)

Tested Component	Result in mg/kg		
	50% (v/v) Ethanol		
	1 st	2 nd	3 rd
(5)	ND	ND	ND
(6)	ND	ND	ND
Limit in mg/kg	0.6		

To be continued

Test Report

Number: SHAH01754798

Tests Conducted

Requirement:

Result of 3rd migration < SML, and

Result of 1st migration ≥ 2nd migration ≥ 3rd migration after consideration of result uncertainty.

Ratio of food contact surface area to volume of component (5) (6) used to establish the compliance of material or article = 0.6 dm² : 100 mL.

Remark: ND = Not Detected

Detection Limit of DAP=0.01mg/kg

For sum of DBP, DIBP, BBP and DEHP (Expressed as DEHP), below equation was used:

Sum = DBP x 5+ DIBP x 4 + BBP x 0.1 + DEHP x 1

As per client's request, the above condition and food simulant were used for the test.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

11 Specific Migration of Primary Aromatic Amines

With reference to Commission Regulation (EU) No. 10/2011 and its amendments, and JRC Technical Guidelines EUR 24815 EN 2011.

I. Test condition:

Food simulant: 3% (w/v) Acetic acid

Temperature: Hot fill Time: 24 hours

II. Test Result:

Test Component: (5) & (6) & (7)							
Test Item	CAS No.	Result (mg/kg)			Detection Limit (mg/kg)	Limit (mg/kg)	
		1 st migration	2 nd migration	3 rd migration			
1	4-Aminodiphenyl	92-67-1	ND	ND	ND	0.002	ND
2	Benzidine	92-87-5	ND	ND	ND	0.002	ND
3	4-Chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	ND
4	2-Naphthylamine	91-59-8	ND	ND	ND	0.002	ND
5	o-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	ND
6	2-Amino-4-Nitrotoluene	99-55-8	ND	ND	ND	0.002	ND
7	p-Chloroaniline	106-47-8	ND	ND	ND	0.002	ND
8	2,4-Diaminoanisole	615-05-4	ND	ND	ND	0.002	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	ND
10	3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	ND
11	3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	ND
12	3,3'-Dimethylbenzidine	119-93-7	ND	ND	ND	0.002	ND
13	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	ND	ND	ND	0.002	ND
14	p-Cresidine	120-71-8	ND	ND	ND	0.002	ND
15	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND	ND	ND	0.002	ND
16	4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	ND
17	4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	ND
18	o-Toluidine	95-53-4	ND	ND	ND	0.002	ND
19	2,4-Toluylenediamine	95-80-7	ND	ND	ND	0.002	ND
20	2,4,5-Trimethylaniline	137-17-7	ND	ND	ND	0.002	ND



Test Report

Number: SHAH01754798

Tests Conducted

21	o-Anisidine	90-04-0	ND	ND	ND	0.002	ND
22	4-Aminoazobenzene	60-09-3	ND	ND	ND	0.002	ND
23	m-Phenylenediamine	108-45-2	ND	ND	ND	0.002	ND
24	Benzoguanamin	91-76-9	ND	ND	ND	0.05	5
25	4,4'-Methylenebis(3-chloro-2,6-diethylaniline	106246-33-7	ND	ND	ND	0.01	0.05
26	Total of other primary aromatic amine	-	ND	ND	ND	0.01	0.01

Requirement:

Result of 3rd migration < SML, and

Result of 1st migration $\geq$ 2nd migration $\geq$ 3rd migration after consideration of result uncertainty.

Result of 1st, 2nd and 3rd migration < SML when SML limit is Not Detected (ND)

Ratio of food contact surface area to volume of component (5) (6) used to establish the compliance of material or article = 0.6 dm² : 100 mL.

Remark: ND = Not detected (less than detection limit)

Other primary aromatic amines are p-Phenylenediamine, Aniline, 2,4-Xylidine, 2,6-Xylidine, 3-Methoxyaniline, 2,6- Toluene-diamine, 1,5-Diaminonaphthalene, 4-Ethoxyaniline, 3-Amino-4-methoxybenzanilide, 3-Amino-4-methylbenzamide, 2-Amino-5-methylbenzoic acid

Tested component(s) : See component list in last section of the report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

To be continued

Test Report

Number: SHAH01754798

Tests Conducted

12 Polycyclic Aromatic Hydrocarbons (PAHs) Content

As Per AfPS GS 2019:01 PAK, by solvent extraction and determined by Gas Chromatography – Mass Spectrometer (GC/MS).

(I) Test Results:

Test Item	CAS No.	Result (in mg/kg)	
		(5)	(6)
1.Phenanthrene	85-01-8	ND	ND
2.Anthracene	120-12-7	ND	ND
3.Fluoranthene	206-44-0	ND	ND
4.Pyrene	129-00-0	ND	ND
Sum (4 PAHs):	--	ND	ND
5.Naphthalene	91-20-3	ND	ND
6.Benzo(a)Anthracene	56-55-3	ND	ND
7.Chrysene	218-01-9	ND	ND
8.Indeno(1,2,3-cd)Pyrene	193-39-5	ND	ND
9.Benzo(b)Fluoranthene	205-99-2	ND	ND
10.Benzo(k)Fluoranthene	207-08-9	ND	ND
11.Benzo(a)Pyrene	50-32-8	ND	ND
12.Dibenzo(a,h)Anthracene	53-70-3	ND	ND
13.Benzo(g,h,i)Perylene	191-24-2	ND	ND
14.Benzo(e)Pyrene	192-97-2	ND	ND
15. Benzo(j)Fluoranthene	205-82-3	ND	ND
Sum (15 PAHs):	--	ND	ND
Classification of Samples: Category		1	1

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

ND= Not detected (Less than reporting limit)
Reporting limit = 0.2 mg/kg

(II) Limits for PAHs in Products:

Parameter	Category 1	Category 2		Category 3	
--	Materials intended to be placed in the mouth, or materials coming into long-term contact with skin (more than 30s) during the intended use - in toys according to Directive 2009/48/EC or -for the use by children up to 3 years of age	Materials that are not covered by Category 1, with long-term skin contact (longer than 30s) or repeated short-term skin contact if used as intended or foreseeable 2a. used by children 2b. other consumer products		Materials that are not covered by Category 1 or 2, with short-term skin contact (up to 30 s) when used as intended or foreseeable 3a. used by children 3b. other consumer products	
		2a	2b	3a	3b
Phenanthrene	--	--	--	--	--
Anthracene	--	--	--	--	--
Fluoranthene	--	--	--	--	--
Pyrene	--	--	--	--	--
Sum (4 PAHs):	<1	<5	<10	<20	<50
Naphthalene	<1	<2	<2	<10	<10
Benzo(a)Anthracene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Indeno(1,2,3-cd)Pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(b)Fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(k)Fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(a)Pyrene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo(a,h)Anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(g,h,i)Perylene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(e)Pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo(j)Fluoranthene	<0.2	<0.2	< 0.5	<0.5	<1
Sum (15 PAHs):	<1	<5	<10	<20	<50

Tested Component(s): See component list in the last section of this report

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

13 Sensory Evaluation

With reference to §64 LFGB 100.90-6.

Test procedure:

Sample was thoroughly rinsed with distilled water and then filled with distilled water to capacity. Fill the test item at boiling temperature and leave it closed for 24 hours. Off-odor and off-taste was evaluated with 6 panelists using control sample of distilled water.

	<u>Result</u>			<u>Limit</u>
	(14)	(15)	(16)	
Appearance	Clear, Colourless	Clear, Colourless	Clear, Colourless	Clear, Colourless
Odor	0	0	0	2.5
Taste	0	0	0	2.5

Assessment:

Intensity scale:

0 = No perceptible odour / taste

1 = Odour / taste just perceptible (but still difficult to define)

2 = Slight odour / taste

3 = Distinct odour / taste

4 = Strong odour / taste

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

14 Phthalate Content in Food Contact Plastic Article

By solvent extraction and Gas Chromatography-Mass Spectrometry (GC-MS) analysis.

<u>Test Item</u>	<u>Result (% w/w)</u>	<u>Detection Limit (% w/w)</u>	<u>Limit (% w/w)</u>
	(5+6)		(Max.)
Dibutyl Phthalate (DBP)	ND	0.01	0.05
Diethyl Hexyl Phthalate (DEHP)	ND	0.01	0.1
Benzyl Butyl Phthalate (BBP)	ND	0.01	0.1
Di-(iso-nonyl) Phthalate (DINP)	ND	0.01	0.1
Di-(iso-decyl) Phthalate (DIDP)	ND	0.01	0.1

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Remark: ND = Not Detected (Less than detection limit)

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

15 Bisphenol-A Content

By solvent extraction and followed by High Performance Liquid Chromatography- Mass Spectrometry (HPLC-MS)/Liquid Chromatography- Tandem Mass Spectrometry (LC-MS/MS) analysis.

<u>Test Item</u>	<u>Result (mg/kg)</u>		<u>Detection Limit (mg/kg)</u>	<u>Applicant's Requirement (mg/kg)</u>
	(5)	(6)		
Bisphenol-A	ND	ND	0.1	0.1

Remark: ND = Not Detected (Less than detection limit)

Tested Components: See component list in the last section of this report.

Testing Summary:

Extraction solvent: Tetrahydrofuran

Ultrasonic bath extraction temperature: 60 °C ± 2 °C

Extraction time: 60 minutes

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

16 Leachable Lead and Cadmium Content

As per European Council Directive 84/500/EEC and Commission Directive 2005/31/EC by inductively coupled plasma emission spectrometer analysis.

Test Condition: 4% acetic acid, (20-24) °C, 24 hours

<u>Tested Specimen (3)</u>	<u>Leaching Volume (mL)</u>	<u>Result (mg/L)</u>	
		<u>Lead</u>	<u>Cadmium</u>
(1)	420	<0.05	<0.02
	Limit (Category 2):	4.0	0.3

<u>Tested Specimen (4)</u>	<u>Leaching Volume (mL)</u>	<u>Result (mg/L)</u>	
		<u>Lead</u>	<u>Cadmium</u>
(1)	420	<0.05	<0.02
	Limit (Category 2):	4.0	0.3

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Detection Limit: Lead: 0.2 mg/L, Cadmium: 0.02 mg/L

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

17 Specific Migration of Heavy Metals(Dutch Commodities Act on Packagings and Consumer Articles Regulation (Warenwetregeling verpakkingen en gebruiksartikelen) Annex A Chapter VI)

With reference to Annex B of Commodities Act on Packagings and Consumer Articles Regulation (Warenwetregeling verpakkingen en gebruiksartikelen), followed by Inductively Coupled Plasma –Mass Spectrometry (ICP-MS) analysis.

I. Test Condition:

<u>Food Simulant</u>	<u>Time and Temperature</u>
3% (w/v) Acetic acid	24 hours at hot filled

II. Test Result:

Element	Result in mg/kg						Reporting Limit (mg/kg)	Limit (mg/kg)
	(3)			(4)				
	1 st	2 nd	3 rd	1 st	2 nd	3 rd		
Arsenic (As)	ND	ND	ND	ND	ND	ND	0.005	0.01
Barium (Ba)	ND	ND	ND	ND	ND	ND	0.25	1
Boron(B)	ND	ND	ND	ND	ND	ND	0.2	1
Cadmium(Cd)	ND	ND	ND	ND	ND	ND	0.001	0.01
Chromium(Cr)	ND	ND	ND	ND	ND	ND	0.01	0.1
Cobalt(Co)	ND	ND	ND	ND	ND	ND	0.01	0.05
Mercury(Hg)	ND	ND	ND	ND	ND	ND	0.001	0.005
Lead (Pb)	ND	ND	ND	ND	ND	ND	0.01	0.1
Lithium (Li)	ND	ND	ND	ND	ND	ND	0.1	0.6
Rubidium (Rb)	ND	ND	ND	ND	ND	ND	0.2	1
Selenium(Se)	ND	ND	ND	ND	ND	ND	0.005	0.01
Strontium (Sr)	ND	ND	ND	ND	ND	ND	0.2	1

Requirement:

Result of 3rd migration < SML, and

Result of 1st migration ≥ 2nd migration ≥ 3rd migration after consideration of result uncertainty.

Remark: ND = Not detected

To be continued

Test Report

Number: SHAH01754798

Tests Conducted

Ratio of food contact surface area to volume of component (3) &(4) used to establish the compliance of material or article = 3.5 dm² : 350 mL.

As per client's request, the above condition and food simulant were used for the test.

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.18, 2024

18 Cadmium (Cd) Content (EU REACH ANNEX XVII Entry 23)

With reference to methods EN 1122 (Method B)/ IEC 62321:2008/ ISO 11885:2007, acid digestion method was used and total Cadmium content was determined by Inductively Coupled Argon Plasma Spectrometry.

<u>Tested Component</u>	<u>Result in %</u>
(1+2)	ND
(3+4)	ND
(5+6)	ND
(7)	ND

Requirement:	
<u>Category</u>	<u>Limit (%)</u>
Painted article	0.1
Plastic	0.01
Metal parts of jewellery & hair accessories	0.01

Remark: ND = Not detected (<0.0005%)

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

19 Lead (Pb) Content (REACH Regulation (EC) No 1907/2006 Annex XVII Entry 63)

With reference to method IEC 62321-5:2013, microwave digestion method was used and total Lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result (%)					Reporting Limit (%)	Limit (%)
	(1+2)	(3+4)	(5+6)	(7)	(8+9)		
Lead (Pb)	0.003	ND	ND	ND	ND	0.001	0.05

The limit was quoted according to Commission Regulation (EU) 2015/628 amending the REACH Regulation (EC) No 1907/2006 Annex XVII (Entry 63) for Lead content in articles which may be placed in the mouth by children during normal or reasonably foreseeable conditions of use.

Remark: ND = Not detected (Less than reporting limit)

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

20 Octamethylcyclotetrasiloxane (D4),Decamethylcyclopentasiloxane(D5) and Dodecamethylcyclohexasiloxane (D6) Content

By solvent extraction and followed by Gas Chromatography – Mass Spectrometry analysis.

Test Item	CAS No.	Result (%)
		(7)
Octamethylcyclotetrasiloxane (D4)	556-67-2	ND
Decamethylcyclopentasiloxane (D5)	541-02-6	ND
Dodecamethylcyclohexasiloxane (D6)	540-97-6	ND

Remark: Reporting limit=0.010%

SVHC = Substance of very high concern

ND = Not detected (the result is less than the reporting limit)

Notes:

1. Substances of very high concern (SVHC) are classified as:

- Carcinogenicity category 1A or 1B;
- Germ cell mutagenicity category 1A or 1B;
- Reproductive toxicity category 1A or 1B, adverse effects on sexual function and fertility or on development;
- Persistent, bioaccumulative and toxic (PBT)
- Very persistent and very bioaccumulative (vPvB)
- Other substances for which there is scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern, such as endocrine disruptors

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- (a) Identity and contact details of the producer or importer;
- (b) Registration number(s), if available;
- (c) Identity of the substance;
- (d) Classification of the substance(s);
- (e) Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- (f) Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Waste Framework Directive (WFD) Requirement:

As per Article 9(1)(i) of Directive 2008/98/EC on waste (WFD, Waste Framework Directive) as amended, Member States shall take measures to ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No 1907/2006 (REACH) provides the information pursuant to Article 33(1) of Regulation (EC) No 1907/2006 (REACH) to the European Chemicals Agency (ECHA) as from 5 January 2021. Any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) on the EU market is required to submit a SCIP Notification on that article to ECHA, as from 5 January 2021.

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

21 Tris (2-Chloroethyl) Phosphate (TCEP) Content

By solvent extraction and followed by Liquid Chromatography - Mass Spectrometry analysis.

Test Item	CAS No.	Result (%)
		(7)
Tris (2-Chloroethyl) Phosphate	115-96-8	ND

Remark: Reporting limit=0.010%

SVHC = Substance of very high concern

ND = Not detected (the result is less than the reporting limit)

Reporting limit = Quantitation limit of analyte in sample

Notes:

1. Substances of very high concern (SVHC) are classified as:

- Carcinogenicity category 1A or 1B;
- Germ cell mutagenicity category 1A or 1B;
- Reproductive toxicity category 1A or 1B, adverse effects on sexual function and fertility or on development;
- Persistent, bioaccumulative and toxic (PBT)
- Very persistent and very bioaccumulative (vPvB)
- Other substances for which there is scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern, such as endocrine disruptors

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- Identity and contact details of the producer or importer;
- Registration number(s), if available;
- Identity of the substance;
- Classification of the substance(s);
- Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Waste Framework Directive (WFD) Requirement:

As per Article 9(1)(i) of Directive 2008/98/EC on waste (WFD, Waste Framework Directive) as amended, Member States shall take measures to ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No 1907/2006 (REACH) provides the information pursuant to Article 33(1) of Regulation (EC) No 1907/2006 (REACH) to the European Chemicals Agency (ECHA) as from 5 January 2021. Any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) on the EU market is required to submit a SCIP Notification on that article to ECHA, as from 5 January 2021.

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

22 Phthalates Content (In SVHC List)

By solvent extraction and followed by Gas Chromatography – Mass Spectrometry analysis.

Test Item	CAS No.	Result (%)
		(7)
Bis (2-Ethylhexyl) Phthalate (DEHP)	117-81-7	ND
Dibutyl Phthalate (DBP)	84-74-2	ND
Benzyl Butyl Phthalate (BBP)	85-68-7	ND
Diisobutyl Phthalate (DIBP)	84-69-5	ND
1,2-Benzenedicarboxylic acid, di-C ₇₋₁₁ -branched and linear alkyl esters (DHNUP)	68515-42-4	ND
1,2-Benzenedicarboxylic acid, di-C ₆₋₈ -branched alkyl esters, C ₇ -rich (DIHP)	71888-89-6	ND
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	ND
Diisopentylphthalate (DIPP)	605-50-5	ND
N-pentyl-isopentylphthalate	776297-69-9	ND
Dipentyl phthalate (DPP)	131-18-0	ND
Dihexyl phthalate	84-75-3	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	ND
1,2-Benzenedicarboxylic acid, di-C ₆₋₁₀ -alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5; 68648-93-1	ND
Dicyclohexyl phthalate (DCHP)	84-61-7	ND
Diisohexyl phthalate	71850-09-4	ND

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Remark: Reporting limit=0.010%
SVHC = Substance of very high concern
ND = Not detected (the result is less than the reporting limit)
Reporting limit = Quantitation limit of analyte in sample

Notes:

1. Substances of very high concern (SVHC) are classified as:
 - (a) Carcinogenicity category 1A or 1B;
 - (b) Germ cell mutagenicity category 1A or 1B;
 - (c) Reproductive toxicity category 1A or 1B, adverse effects on sexual function and fertility or on development;
 - (d) Persistent, bioaccumulative and toxic (PBT)
 - (e) Very persistent and very bioaccumulative (vPvB)
 - (f) Other substances for which there is scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern, such as endocrine disrupters

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- (a) Identity and contact details of the producer or importer;
- (b) Registration number(s), if available;
- (c) Identity of the substance;
- (d) Classification of the substance(s);
- (e) Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- (f) Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Waste Framework Directive (WFD) Requirement:

As per Article 9(1)(i) of Directive 2008/98/EC on waste (WFD, Waste Framework Directive) as amended, Member States shall take measures to ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No 1907/2006 (REACH) provides the information pursuant to Article 33(1) of Regulation (EC) No 1907/2006 (REACH) to the European Chemicals Agency (ECHA) as from 5 January 2021. Any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) on the EU market is required to submit a SCIP Notification on that article to ECHA, as from 5 January 2021.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Tested Component(s): See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

23 Phthalate Content (REACH Regulation (EC) No 1907/2006 Annex XVII Entry 51 and Entry 52)

With reference to ISO 8124-6: 2018, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

I. Annex XVII Entry 51

Test Item	CAS No.	Result (%w/w)	Reporting Limit (%w/w)	Limit (%w/w)
		(7)		
Dibutyl phthalate (DBP)	84-74-2	ND	0.005	--
Diethyl hexyl phthalate (DEHP)	117-81-7	ND	0.005	--
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.005	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.005	--
Sum of DBP, DEHP, BBP and DIBP	--	ND	--	0.1

The above limit was quoted according to Annex XVII Entry 51 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 & Amendment Commission Regulation (EU) 2018/2005 for Phthalate content in articles.

II. Annex XVII Entry 52

Test Item	CAS No.	Result (%w/w)	Reporting Limit (%w/w)	Limit (%w/w)
		(7)		
Di-n-octyl phthalate (DnOP)	117-84-0	ND	0.005	--
Diisononyl phthalate (DINP)	28553-12-0/ 68515-48-0	ND	0.005	--
Diisodecyl phthalate (DIDP)	26761-40-0/ 68515-49-1	ND	0.005	--
Sum of DINP, DNOP and DIDP	--	ND	--	0.1

The above limit was quoted according to Annex XVII Entry 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 for Phthalate content in toys and childcare articles.

Remark: ND = Not detected (Less than reporting limit)

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

24 Short-Chain Chlorinated Paraffins (C10~C13)(SCCPs) Content

By solvent extraction, determined by Gas Chromatography-Electron Capture Detector (GC-ECD) and Gas Chromatography-Negative Chemical Ionization-Mass Spectrometry (GC-NCI-MS).

<u>Tested Component</u>	<u>Result (%. w/w)</u>
(7)	ND

Requirement:

Short Chain Chlorinated Paraffin's concentration should be lower than 0.15% in articles under Annex I Part A of the Regulation (EU) 2019/1021 on persistent organic pollutants (POPs).

Remark: Detection Limit = 0.01% (w/w)

ND = Not detected

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

25 Cobalt Dichloride, Cobalt (II) Carbonate, Cobalt (II) Diacetate, Cobalt (II) Dinitrate and Cobalt (II) Sulphate Content

By acid digestion and followed by Inductively Coupled Plasma- Optical Emission Spectrometer (ICP-OES) analysis.

<u>Test Item</u>	<u>CAS No.</u>	<u>Result (%. w/w)</u>	
		(3)	(4)
Cobalt dichloride Δ	7646-79-9	ND	ND
Cobalt (II) carbonate Δ	513-79-1	ND	ND
Cobalt (II) diacetate Δ	71-48-7	ND	ND
Cobalt (II) dinitrate Δ	10141-05-6	ND	ND
Cobalt (II) sulphate Δ	10124-43-3	ND	ND

Remark: ND = Not Detected (Less than detection limit)

Detection limit = 0.01%

Δ = Determination was based on elemental analysis. The content was calculated based on assumption of worst-case.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- (a) Identity and contact details of the producer or importer;
- (b) Registration number(s), if available;
- (c) Identity of the substance;
- (d) Classification of the substance(s);
- (e) Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- (f) Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

26 Disodium Tetraborate, anhydrous, Tetraboron Disodium Heptoxide, hydrate and Diboron Trioxide Content

By acid digestion and followed by Inductively Coupled Plasma- Optical Emission Spectrometer (ICP-OES) analysis.

Test Item	CAS No.	Result (% w/w)	
		(3)	(4)
Disodium tetraborate, anhydrous Δ	1303-96-4 1330-43-4 12179-04-3	ND	ND
Tetraboron disodium heptoxide, hydrate Δ	12267-73-1	ND	ND
Diboron trioxide Δ	1303-86-2	ND	ND

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Remark: ND = Not Detected (Less than detection limit)

Detection limit = 0.01%

Δ = Determination was based on elemental analysis. The content was calculated based on assumption of worst-case.

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- (a) Identity and contact details of the producer or importer;
- (b) Registration number(s), if available;
- (c) Identity of the substance;
- (d) Classification of the substance(s);
- (e) Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- (f) Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

27 Toxic Elements Analysis

As per European Directive 94/62/EC and Amendments 2004/12/EC & 2005/20/EC & 2013/2/EU on packaging and packaging waste, acid digestion method was used and total toxic elements and Hexavalent Chromium content were determined by Inductively Coupled Argon Plasma Spectrometry and by UV-Visible Spectrophotometry.

		<u>Result (ppm)</u>		<u>Limit (ppm)</u>
	(10)	(11)	(12)	
Lead (Pb)	<5	<5	<5	--
Cadmium (Cd)	<5	<5	<5	--
Mercury (Hg)	<5	<5	<5	--
Chromium VI (Cr (VI))	<5	<5	<5	--
Total	<5	<5	<5	100

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

Remark: ppm = Parts per million = mg/kg

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

28 Dibutylbis(pentane-2,4-dionato-O,O')tin Content

By acid digestion and followed by Inductively Coupled Plasma- Optical Emission Spectrometer (ICP-OES) analysis.

Test Item	CAS No.	Result (%, w/w)
		(5+6)
Dibutylbis(pentane-2,4-dionato-O,O')tin Δ	22673-19-4	ND

Remark: ND = Not Detected (Less than reporting limit)

Reporting limit = 0.01%

Δ = Determination was based on elemental analysis. The content was calculated based on assumption of worst-case.

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- Identity and contact details of the producer or importer;
- Registration number(s), if available;
- Identity of the substance;
- Classification of the substance(s);
- Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- Tonnage range of the substance(s).

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

29 2-methylimidazole Content

By solvent extraction and followed by Gas Chromatography-Mass Spectrometry (GC-MS) analysis.

Test Item	CAS No.	Result (% w/w)
		(5+6)
2-methylimidazole	693-98-1	ND

Remark: ND = Not Detected (Less than reporting limit)

Reporting limit = 0.01%

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- Identity and contact details of the producer or importer;
- Registration number(s), if available;
- Identity of the substance;
- Classification of the substance(s);
- Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- Tonnage range of the substance(s).

As per Article 31 of Regulation (EC) No 1907/2006 (REACH) as amended, the supplier of mixture not classified as hazardous according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP), shall provide the recipient at his request with a safety data sheet, where a mixture contains at least one substance on the SVHC list (Candidate List of substances of very high concern for Authorisation) and its individual concentration is of 0.1% or above by weight for non-gaseous mixtures.

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tested Components: See component list in the last section of this report.

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

30 Tris(4-nonylphenyl, Branched and Linear) Phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, Branched and Linear (4-NP) Content

By solvent extraction and followed by Gas Chromatography-Mass Spectrometry (GC-MS) / Liquid Chromatography with tandem mass spectrometry (LC-MS-MS) analysis.

Test Item	CAS No.	Result (% w/w)
		(5+6)
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	ND

Remark: ND = Not Detected (Less than reporting limit)
Reporting limit = 0.01%

REACH Requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- Identity and contact details of the producer or importer;
- Registration number(s), if available;
- Identity of the substance;
- Classification of the substance(s);
- Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- Tonnage range of the substance(s).

To be continued



Test Report

Number: SHAH01754798

Tests Conducted

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tested Components: See component list in the last section of this report.



Picture of sample

Date Sample Received: Oct.31, 2024

Testing Period: Oct.31, 2024 To Nov.6, 2024

To be continued

Test Report

Number: SHAH01754798

Tests Conducted

Seq. Test component

- 1 Black coating on metal. (design on body)
- 2 White coating on metal. (design on body)
- 3 Black ceramic. (inner body)
- 4 White ceramic. (inner body)
- 5 Black plastic. (lid)
- 6 White plastic. (lid)
- 7 Black silicone ring.
- 8 Silver color metal excluding coating. (body)
- 9 Silver color metal. (on lid)
- 10 Brown paper board with multi-color coatings and black printing. (box)
- 11 White paper with black printing. (instruction page)
- 12 White paper. (packages)
- 13 Whole sample (black style)
- 14 Whole sample (white style)
- 15 Whole sample (silver style)

End Of Report

The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8/09:2019 (Non-binary acceptance based on guard band $w = U$) except designation from the customer, regulation or test specification. This decision rule only applies to the numeric test results.

The sample(s) and sample information hereto are provided by the client who shall be solely responsible for the authenticity and integrity thereof. The results shown in this report relate only to the sample(s) received and tested. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. This report shall not be reproduced unless with prior written approval from Intertek Testing Services Shanghai Ltd.

