

Test Report

No.: 68.431.22.4486.01

Date: 2022-12-19



Greater China

Applicant: Spector & CO
Address: /
Product Name: ADDI WIRELESS SPEAKER
Item No.: T230
Style No.: ADDI
End Use: Technology
Supplier: USU019
Country of Origin: CHINA
Country of Destination: CANADA & U.S.A.
Receipt Date of Sample: 2022-10-20, 2022-12-01
Date of Testing: From 2022-10-20 to 2022-12-19
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item	Conclusion
1. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials	Pass*
2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials	Pass*
3. US California Proposition 65 - Total lead Content Test - Paint and Similar Surface-Coating Materials	Pass*
4. US California Proposition 65 - Total Lead Content Test - Substrate Materials	Pass*
5. Phthalates Content (11P)	Pass*
6. Tungsten Content Test	Report As Is
7. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Lead Content Test	Pass
8. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test	Pass
9. Total Nickel Content Test	Report As Is
10. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)	Pass
11. US California Proposition 65 - Phthalates Content (6P)	Pass*
12. Canadian Products Containing Mercury Regulations SOR/2014-254 - Total Mercury Content Test	Pass
13. Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)	Pass*

Remarks: 1. MDL = Method Detection Limit
2. N.D. = Not Detected (<MDL)
3. ≤ Less than
4. 1 mg/kg = 1 ppm = 0.0001%
5. NA=Not Applicable

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Lab 1 - Chemical testing and part of electrical testing Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Lab 2 - Physical & Mechanical Test: Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

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TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Testing Center

Prepared by:

Authorized by:

Jojo Zhao



Eva Liang

Jojo Zhao
Project Coordinator

Eva Liang
Project Manager

Note:

- (1) The TÜV SÜD Certification and Testing (China) Co., Ltd. "General Terms & Conditions" applied.
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For further details, please see "Testing and certification regulation", chapter A-3.4
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- (2) The results relate only to the Items tested.
- (3) The test report shall not be reproduced except in full without the written approval of the laboratory
- (4) If relevant standards do not specify decision rule(s), follow decision rule as below:
- "Pass" means that the measured result is within the limits, even when extended by expanded uncertainty at a level of confidence of 95%.
- "Fail" means that the measured result is beyond the limit, even when extended by expanded uncertainty at a level of confidence of 95%.
- (5) The test item and sample were specified by the client.
- (6) "*" denotes the conclusion was drawn according to the client's specification.

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Description of Tested Subject:

Sample	Description	Photo
A	Whole product	

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Sample	Description	Photo
A	Whole product	
001	Black coating (Net of speaker)	
002	Silvery metal (Net of speaker)	
003	Dull silvery plated coppery metal (Shell) (Silvery style)	
004	White coating (Control panel)	
005	Black plastic (Bottom)	
006	Black plastic (Rotary knob)	

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Sample	Description	Photo
007	Translucent white plastic (LED)	
008	Transparent laminated black printed white paper sticker (Bottom)	
009	Black soft plastic w/ adhesive backing (Foot pad)	

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Sample	Description	Photo
010	Bright black plated coppery metal (Shell) (Bright black style)	
011	Black coating (Shell) (Black style)	
012	Coppery metal (Shell) (Black style)	

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Sample	Description	Photo
013	Dark blue coating (Shell) (Blue style)	
014	Silvery plated coppery metal (Shell) (Blue style)	
015	White coating (Shell) (White style)	

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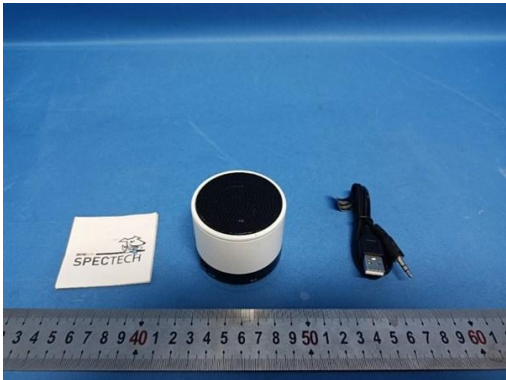


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Sample	Description	Photo
016	Silvery metal (Shell) (White style)	
017	Silvery metal (Tip of 3.5mm plug)	
018	Black plastic (3.5mm plug)	
019	Silvery metal (Second part of 3.5mm plug)	
020	Silvery metal (Third part of 3.5mm plug)	
021	Black soft plastic (3.5mm plug, micro-USB plug, USB-A plug)	
022	Silvery metal (USB-A plug)	

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Sample	Description	Photo
023	White plastic (USB-A plug)	
024	Black soft plastic (Cable jacket)	
025	Transparent laminated orange / black printed white paper sticker (Label of cable)	
026	Silvery metal (Micro-USB plug)	

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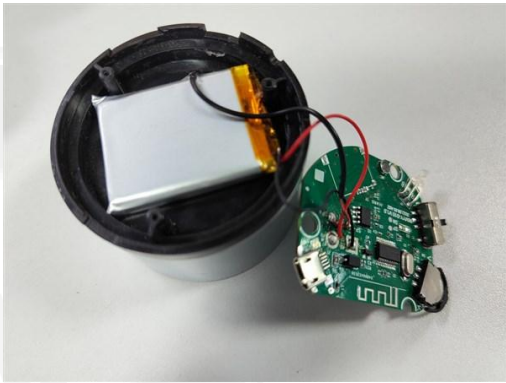
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Sample	Description	Photo
027	Dark grey plastic (Micro-USB plug)	
028	Green / white printed brown PCB (Main PCB)	
035	Red soft plastic (Wire jacket inner cable)	

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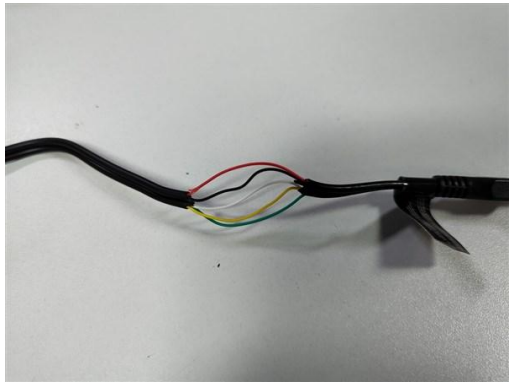

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Sample	Description	Photo
037	Yellow soft plastic (Wire jacket inner cable)	
040	Black plastic w/ white printing (Shell)	

T. No	Sample	Description
T1	001	Black coating (Net of speaker)
T2	002	Silvery metal (Net of speaker)
T3	003	Dull silvery plated coppery metal (Shell) (Silvery style)
T4	004	White coating (Control panel)
T5	005	Black plastic (Bottom)
T6	006	Black plastic (Rotary knob)
T7	007	Translucent white plastic (LED)
T8	008	Transparent laminated black printed white paper sticker (Bottom)
T9	009	Black soft plastic w/ adhesive backing (Foot pad)
T10	010	Bright black plated coppery metal (Shell) (Bright black style)
T11	011	Black coating (Shell) (Black style)
T12	012	Coppery metal (Shell) (Black style)
T13	013	Dark blue coating (Shell) (Blue style)
T14	014	Silvery plated coppery metal (Shell) (Blue style)
T15	015	White coating (Shell) (White style)
T16	016	Silvery metal (Shell) (White style)
T17	017	Silvery metal (Tip of 3.5mm plug)
T18	018	Black plastic (3.5mm plug)
T19	019	Silvery metal (Second part of 3.5mm plug)

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T. No	Sample	Description
T20	020	Silvery metal (Third part of 3.5mm plug)
T21	021	Black soft plastic (3.5mm plug, micro-USB plug, USB-A plug)
T22	022	Silvery metal (USB-A plug)
T23	023	White plastic (USB-A plug)
T24	024	Black soft plastic (Cable jacket)
T25	025	Transparent laminated orange / black printed white paper sticker (Label of cable)
T26	026	Silvery metal (Micro-USB plug)
T27	027	Dark grey plastic (Micro-USB plug)
T28	028	Green / white printed brown PCB (Main PCB)
T29	035	Red soft plastic (Wire jacket inner cable)
T30	037	Yellow soft plastic (Wire jacket inner cable)
T31	040	Black plastic w/ white printing (Shell)



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Test Result(s):

1. US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001	mg/kg	10	75	N.D.	Pass
004	mg/kg	10	75	N.D.	Pass
011	mg/kg	10	75	N.D.	Pass
013	mg/kg	10	75	N.D.	Pass
015	mg/kg	10	75	N.D.	Pass

2. US California Proposition 65 - Total Cadmium Content Test - Substrate Materials

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
002	mg/kg	10	75	N.D.	Pass
003	mg/kg	10	75	N.D.	Pass
005+025	mg/kg	10	75	N.D.	Pass
006+008	mg/kg	10	75	N.D.	Pass
007	mg/kg	10	75	N.D.	Pass
009+021+024	mg/kg	10	75	N.D.	Pass
010	mg/kg	10	75	N.D.	Pass
012	mg/kg	10	75	N.D.	Pass
014	mg/kg	10	75	N.D.	Pass
016	mg/kg	10	75	N.D.	Pass
017	mg/kg	10	75	N.D.	Pass
018+023	mg/kg	10	75	N.D.	Pass
019	mg/kg	10	75	N.D.	Pass
020	mg/kg	10	75	N.D.	Pass
022	mg/kg	10	75	N.D.	Pass
026	mg/kg	10	75	N.D.	Pass
027	mg/kg	10	75	N.D.	Pass

3. US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
001	mg/kg	10	90	34.7	Pass
004	mg/kg	10	90	N.D.	Pass
011	mg/kg	10	90	N.D.	Pass
013	mg/kg	10	90	N.D.	Pass

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015	mg/kg	10	90	N.D.	Pass
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4. US California Proposition 65 - Total Lead Content Test - Substrate Materials

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
002	mg/kg	10	100	N.D.	Pass
003	mg/kg	10	100	N.D.	Pass
005+025	mg/kg	10	100	37.8	Pass
006+008	mg/kg	10	100	N.D.	Pass
007	mg/kg	10	100	N.D.	Pass
009+021+024	mg/kg	10	100	N.D.	Pass
010	mg/kg	10	100	N.D.	Pass
012	mg/kg	10	100	N.D.	Pass
014	mg/kg	10	100	N.D.	Pass
016	mg/kg	10	100	N.D.	Pass
017	mg/kg	10	100	28.5	Pass
018+023	mg/kg	10	100	N.D.	Pass
019	mg/kg	10	100	N.D.	Pass
020	mg/kg	10	100	N.D.	Pass
022	mg/kg	10	100	66.8	Pass
026	mg/kg	10	100	48.7	Pass
027	mg/kg	10	100	N.D.	Pass

5. Phthalates Content (11P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001	004
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	0.012
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.

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Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					005+025	006+008
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					007	009
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.

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Lab 2 - Physical & Mechanical Test:

Building A2, Jin'ao Industrial Park, No. 150, Jingfang Road, Fuhai, Baoan District, Shenzhen, Guangdong, China

Test Report

No.: 68.431.22.4486.01

Date: 2022-12-19



Greater China

Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					011	013
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	0.005
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					015	018+023
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.

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Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	0.009	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					021	024
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	0.028
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)
					027
Diethyl phthalate(DEP)	84-66-2	%	0.005	0.1	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.

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Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Di-n-octyl phthalate, (DNOP)	117-84-0	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.
Conclusion					Pass

6. Tungsten Content Test

Test with reference to acid digestion and determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test items	Unit	MDL	Maximum Permissible Limit	Result(s)
				002
Tungsten(W)	mg/kg	10.0	-	N.D.
Conclusion				Report As Is

7. Canadian Surface Coating Materials Regulations SOR/2016-193 - Total Lead Content Test

Test with reference to microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001	mg/kg	10	90	34.7	Pass
004	mg/kg	10	90	N.D.	Pass
011	mg/kg	10	90	N.D.	Pass
013	mg/kg	10	90	N.D.	Pass
015	mg/kg	10	90	N.D.	Pass

8. Canadian Consumer Products Containing Lead Regulations SOR/2018-83 - Total Lead Content Test

Test with reference to acid digestion or microwave digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001	mg/kg	10	90	34.7	Pass
002	mg/kg	10	90	N.D.	Pass
003	mg/kg	10	90	N.D.	Pass
004	mg/kg	10	90	N.D.	Pass

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005+025	mg/kg	10	90	37.8	Pass
006+008	mg/kg	10	90	N.D.	Pass
007	mg/kg	10	90	N.D.	Pass
009+021+024	mg/kg	10	90	N.D.	Pass
010	mg/kg	10	90	N.D.	Pass
011	mg/kg	10	90	N.D.	Pass
012	mg/kg	10	90	N.D.	Pass
013	mg/kg	10	90	N.D.	Pass
014	mg/kg	10	90	N.D.	Pass
015	mg/kg	10	90	N.D.	Pass
016	mg/kg	10	90	N.D.	Pass
017	mg/kg	10	90	28.5	Pass
018+023	mg/kg	10	90	N.D.	Pass
019	mg/kg	10	90	N.D.	Pass
020	mg/kg	10	90	N.D.	Pass
022	mg/kg	10	90	66.8	Pass
026	mg/kg	10	90	48.7	Pass
027	mg/kg	10	90	N.D.	Pass

9. Total Nickel Content Test

Test with reference to acid digestion, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Client's Limit	Result(s)	Conclusion
002	mg/kg	5	-	96.603	Report As Is
003	mg/kg	5	-	337.904	Report As Is
010	mg/kg	5	-	136.728	Report As Is
012	mg/kg	5	-	143.956	Report As Is
014	mg/kg	5	-	8639.272	Report As Is
016	mg/kg	5	-	111.965	Report As Is
017	mg/kg	5	-	2552.032	Report As Is
019	mg/kg	5	-	9347.399	Report As Is
020	mg/kg	5	-	10115.536	Report As Is
022	mg/kg	5	-	121.829	Report As Is
026	mg/kg	5	-	15172.414	Report As Is

10. U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001	004
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	0.012

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Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005+025	006+008
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					007	009
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.

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Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					011	013
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	0.005
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					015	018+023
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	0.009	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

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Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					021	024
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	0.028
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					027
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Diisobutylphthalate, (DIBP)	84-69-5	%	0.005	0.1	N.D.
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	0.1	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.
Di-n-pentyl phthalates (DnPP)	131-18-0	%	0.005	0.1	N.D.
Conclusion					Pass

11. US California Proposition 65 - Phthalates Content (6P)

Test with reference to in-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					001	004
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.

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Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	0.012
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					005+025	006+008
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					007	009
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

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No.: 68.431.22.4486.01

Date: 2022-12-19



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Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					011	013
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	0.005
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					015	018+023
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	0.009	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					021	024
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.	0.028
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.	N.D.
Conclusion					Pass	Pass

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Parameter	CAS No.	Unit	MDL	Client's Limit	Result(s)
					027
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	0.1	N.D.
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	0.1	N.D.
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	0.1	N.D.
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	0.1	N.D.
Di-n-hexyl phthalate (DNHP)	84-75-3	%	0.005	0.1	N.D.
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	0.1	N.D.
Conclusion					Pass

12. Canadian Products Containing Mercury Regulations SOR/2014-254 - Total Mercury Content Test

Test with reference to EN 62321-4:2014+A1:2017, determination by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Sample	Unit	MDL	Limit	Result(s)	Conclusion
001	mg/kg	10	1000	N.D.	Pass
002	mg/kg	10	1000	N.D.	Pass
003+010+012	mg/kg	10	1000	N.D.	Pass
004	mg/kg	10	1000	N.D.	Pass
005+025	mg/kg	10	1000	N.D.	Pass
006+008	mg/kg	10	1000	N.D.	Pass
007	mg/kg	10	1000	N.D.	Pass
009+021+024	mg/kg	10	1000	N.D.	Pass
011	mg/kg	10	1000	N.D.	Pass
013	mg/kg	10	1000	N.D.	Pass
014	mg/kg	10	1000	N.D.	Pass
015	mg/kg	10	1000	N.D.	Pass
016	mg/kg	10	1000	N.D.	Pass
017+019+020	mg/kg	10	1000	N.D.	Pass
018+023	mg/kg	10	1000	N.D.	Pass
022+026	mg/kg	10	1000	N.D.	Pass
027	mg/kg	10	1000	N.D.	Pass

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13. Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

Test with reference to in- house method, determination by LC-MS/LC-MC-MS.

Compound	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					013	021
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	27619-97-2	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	3825-26-1	mg/kg	0.025	<0.025	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	335-95-5	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	2395-00-8	mg/kg	0.025	<0.025	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	335-93-3	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	335-66-0	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	1763-23-1	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctane sulphonamide(PFOA)	754-91-6	mg/kg	0.025	<0.025	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOF)*	307-35-7	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	2795-39-3	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium perfluorooctanesulphonate(PFOS-NH4)*	29081-56-9	mg/kg	0.025	<0.025	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	251099-16-8	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	70225-14-8	mg/kg	0.025	<0.025	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	29457-72-5	mg/kg	0.025	<0.025	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	56773-42-3	mg/kg	0.025	<0.025	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	mg/kg	0.5	<0.5	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	mg/kg	0.5	<0.5	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	4021-47-0	mg/kg	0.025	<0.025	N.D.	N.D.
Conclusion					Pass	Pass

Compound	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					028	035
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	27619-97-2	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	3825-26-1	mg/kg	0.025	<0.025	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	335-95-5	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	2395-00-8	mg/kg	0.025	<0.025	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	335-93-3	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	335-66-0	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	1763-23-1	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctane sulphonamide(PFOA)	754-91-6	mg/kg	0.025	<0.025	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOF)*	307-35-7	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	2795-39-3	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium perfluorooctanesulphonate(PFOS-NH4)*	29081-56-9	mg/kg	0.025	<0.025	N.D.	N.D.

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Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	251099-16-8	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	70225-14-8	mg/kg	0.025	<0.025	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	29457-72-5	mg/kg	0.025	<0.025	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	56773-42-3	mg/kg	0.025	<0.025	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	mg/kg	0.5	<0.5	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	mg/kg	0.5	<0.5	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	4021-47-0	mg/kg	0.025	<0.025	N.D.	N.D.
Conclusion					Pass	Pass

Compound	CAS No.	Unit	MDL	Client's Limit	Result(s)	
					037	040
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	27619-97-2	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	3825-26-1	mg/kg	0.025	<0.025	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	335-95-5	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	2395-00-8	mg/kg	0.025	<0.025	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	335-93-3	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	335-66-0	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	1763-23-1	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	754-91-6	mg/kg	0.025	<0.025	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOSF)*	307-35-7	mg/kg	0.025	<0.025	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	2795-39-3	mg/kg	0.025	<0.025	N.D.	N.D.
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	29081-56-9	mg/kg	0.025	<0.025	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	251099-16-8	mg/kg	0.025	<0.025	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	70225-14-8	mg/kg	0.025	<0.025	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	29457-72-5	mg/kg	0.025	<0.025	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	56773-42-3	mg/kg	0.025	<0.025	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	mg/kg	0.5	<0.5	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	mg/kg	0.5	<0.5	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	4021-47-0	mg/kg	0.025	<0.025	N.D.	N.D.
Conclusion					Pass	Pass

Note “*” denotes the result of the substances are converted according to the corresponding compounds

-End of Test Report-

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