



Test Report

No.T32320240015SC

Date: Jan 12, 2023

Page 1 of 19

CAMELBAK
2000 SOUTH MCDOWELL BLVD. SUITE 200, PETALUMA, CA, 94954, UNITED STATES

The following samples were submitted and identified by/on behalf of the client as:
CDM-MANUFACTURED CRUX RESERVOIR

Part ID	Part Description	Part Type
1228401003	Crux Standard 3L Reservoir assembly, complete	assembly
100690406	Big Bite Valve	silicone
101536401	Hydration Tube, 39"	multi-layer extruded tubing of polyolefins and antimicrobial
101507401-body	Tubing coupler body	acetal (POM)
101507401-oring	Tubing coupler o-ring	EPDM rubber (same matl. as K5)
3-2037	Body, 45deg hydrolock valve, Blue	PP copolymer
3-2039	Barrel, 45deg hydrolock valve, Grey	LDPE
3-2040	O-Ring, 45deg hydrolock valve, Black	EPDM
101563401	Crux 3L reservoir body, tested as pair of TPU panels	extruded multi-layer film of TPUs, blue colorant and anti-microbial
3-1664-firstshot	Crux Reservoir Cap, first shot only (no overmold)	PP copolymer
3-1664-TPEsquares	Overmolded grey cap trim (outside) and seal (inside), tested as TPE resin squares	TPE
3-1700	Fill Port	TPU
3-0884	Exit Port fitment	TPU
101506402-body	Exit port coupler body	acetal (POM)
101506402-valve	Exit port coupler valve	acetal (POM)
101506402-spring	Exit port coupler spring	stainless steel
101506402-oring	Exit port coupler o-ring	EPDM rubber
3-2157	SEP (standard exit port) exit port	TPU

Case No. : CA323202400209
Project Description : CDM-MANUFACTURED CRUX RESERVOIR – FDA, PHTHALATES, BPA, CANADA LEAD
Country of Destination : UNITED STATES
Sample Receiving Date : JAN 03, 2023
Testing Period : JAN 03, 2023 – JAN 11, 2023

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Test Requested	Conclusion
1. Bisphenol A (BPA) Content	--
2. US FDA 21 CFR 177.2600 (Rubber Articles) – Determination of Amount of Extractives (As per client's request)	PASS
3. US FDA 21 CFR 177.2470 (Polyoxymethylene Copolymer)	--
a) Total extractives	PASS
b) Net chloroform-soluble extractives	PASS
4. US FDA 21 CFR 177.1520 (Olefin Polymers)	--
1) Polypropylene copolymer	PASS
a) Density	PASS
b) Extractable fraction	PASS
c) Soluble fraction	PASS
2) Polyethylene	PASS
a) Density	PASS
b) Extractable fraction	PASS
c) Soluble fraction	PASS
5. US FDA 21 CFR 177.1210 (Closure with Sealing Gaskets) – Determination of Amount of Net Chloroform Soluble Extractives	PASS
6. European Regulation (EC) No. 1907/2006 (REACH) Annex XVII and its amendment (EU) 2018/2005 – Phthalate content (As per client's request)	PASS
7. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and Technical Guide on Metals and alloys used in food contact materials of Council of Europe Resolution CM/Res(2013)9.	--
a) Metal / Metallic Coating – Extractable Heavy Metals	PASS
8. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Consumer Products Containing Lead Regulations, SOR/2018-83 – Total Lead content	PASS

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

Signed for and on behalf of
SGS Hong Kong Ltd.



Lam Chi Ho, Jacko
Senior Chemist

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Test Results:

1. Bisphenol A (BPA) Content

Method: Solvent extraction

Analysis was performed by High Performance Liquid Chromatography – Tandem Mass Spectrometer (HPLC-MS/MS)

Specimen Description	Reporting Limit (mg/kg)	Result(s) (mg/kg)
1. Semi-transparent blue silicone rubber (Big bite valve) (100690406)	0.1	ND
2. Transparent blue plastic (Hydration tube) (101536401)	0.1	ND
3. Blue plastic (Tubing coupler body) (101507401-body)	0.1	ND
4. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037)	0.1	ND
5. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039)	0.1	ND
6. Semi-transparent blue plastic (Crux 3L reservoir body) (101563401)	0.1	ND
7. Blue plastic (Crux reservoir cap) (3-1664-firstshot)	0.1	ND
8. Grey plastic (Crux cap trim and seal) (3-1664-TPE)	0.1	ND
9. Blue plastic (Fill Port) (3-1700)	0.1	ND
10. Blue plastic (Exit port Fitment) (3-0884)	0.1	ND
11. Blue plastic (Exit port coupler body) (101506402-body)	0.1	ND
12. Off white plastic (Exit port coupler valve) (101506402-valve)	0.1	ND
13. Black rubber (Exit port coupler o-ring) (101506402-o-ring)	0.1	0.3
14. Blue plastic (SEP Standard exit port) (3-2157)	0.1	ND

- Note:
- mg/kg = milligram per kilogram
 - ND = Not Detected (lower than reporting limit)
 - Relative expanded method uncertainty: ±20%

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2. US FDA 21 CFR 177.2600 (Rubber Articles) – Determination of Amount of Extractives

Method : With reference to US FDA 21 CFR 177.2600.

Extractants	Test Condition	Result (mg/inch ²)		Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		1	2		
Distilled Water	Reflux temperature for 7 hours	ND	0.1	0.1	20
	Succeeding 2 hours of extraction	ND	ND	0.1	1
Comment	--	PASS	PASS	--	--

Extractants	Test Condition	Result (mg/inch ²)		Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		3	4		
Distilled Water	Reflux temperature for 7 hours	0.3	0.1	0.1	20
	Succeeding 2 hours of extraction	ND	ND	0.1	1
Comment	--	PASS	PASS	--	--

Extractants	Test Condition	Result (mg/inch ²)		Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		5	6		
Distilled Water	Reflux temperature for 7 hours	0.1	ND	0.1	20
	Succeeding 2 hours of extraction	ND	ND	0.1	1
Comment	--	PASS	PASS	--	--

Sample Description :

1. Semi-transparent blue silicone rubber (Big bite valve) (100690406) (A)
2. Transparent blue plastic (Hydration tube) (101536401) (B)
3. Semi-transparent blue plastic (Crux 3L reservoir body) (101563401) (E)
4. Blue plastic (Fill Port) (3-1700) (I)
5. Blue plastic (Exit port Fitment) (3-0884) (J)
6. Blue plastic (SEP Standard exit port) (3-2157) (N)

Note : 1. mg/inch² = milligram per square inch
 2. ND = Not Detected

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3. US FDA 21 CFR 177.2470 (Polyoxymethylene Copolymer)

a) Total extractives

Method : With reference to 21 CFR 177. 2470 (d)(2).

Extractants	Test Condition	Result (%)	Reporting Limit (%)	Permissible Limit (%)
		1		
Distilled Water	Reflux for 6 hours	0.03	0.02	0.20
n-Heptane	Reflux for 6 hours	0.07	0.02	0.15
Comment	--	PASS	--	--

Extractants	Test Condition	Result (%)	Reporting Limit (%)	Permissible Limit (%)
		2		
Distilled Water	Reflux for 6 hours	0.03	0.02	0.20
n-Heptane	Reflux for 6 hours	0.10	0.02	0.15
Comment	--	PASS	--	--

Extractants	Test Condition	Result (%)	Reporting Limit (%)	Permissible Limit (%)
		3		
Distilled Water	Reflux for 6 hours	0.06	0.02	0.20
n-Heptane	Reflux for 6 hours	0.08	0.02	0.15
Comment	--	PASS	--	--

Sample Description :

1. Blue plastic (Tubing coupler body) (101507401-body) (C1)
2. Blue plastic (Exit port coupler body) (101506402-body) (K1)
3. Off white plastic (Exit port coupler valve) (101506402-valve) (K3)

Note : 1. % = percent by weight
 2. ND = Not detected

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b) Net chloroform-soluble extractives

Method : With reference to 21 CFR 177. 2470 (d)(1); with reference to US FDA 21 CFR 175.300 (c)(3) and (d).

Extractants	Test Condition	Result (mg/inch ²)	Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		1		
Distilled Water	120°F for 24 hours	ND	0.2	0.5
Comment	--	PASS	--	--

Extractants	Test Condition	Result (mg/inch ²)	Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		2		
Distilled Water	120°F for 24 hours	ND	0.2	0.5
Comment	--	PASS	--	--

Extractants	Test Condition	Result (mg/inch ²)	Reporting Limit (mg/inch ²)	Permissible Limit (mg/inch ²)
		3		
Distilled Water	120°F for 24 hours	ND	0.2	0.5
Comment	--	PASS	--	--

Sample Description :

1. Blue plastic (Tubing coupler body) (101507401-body) (C1)
2. Blue plastic (Exit port coupler body) (101506402-body) (K1)
3. Off white plastic (Exit port coupler valve) (101506402-valve) (K3)

Note : 1. mg/inch² = milligram per inch square
 2. ND = Not detected

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4. US FDA 21 CFR 177.1520 (Olefin Polymers)

1) Polypropylene copolymer

a) Density

Method : With reference to 21 CFR 177.1520 d(1) or ASTM D792:2008, determined at 23°C.

Test Item	Result (g/mL)	Permissible Limit (g/mL)
	1	
Density at 23°C	0.90	0.85 – 1.00
Comment	PASS	--

Test Item	Result (g/mL)	Permissible Limit (g/mL)
	2	
Density at 23°C	0.90	0.85 – 1.00
Comment	PASS	--

Sample Description :

1. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037) (D1)
2. Blue plastic (Crux reservoir cap) (3-1664-firstshot) (H1)

Note : g/mL = gram per milliliter

b) Extractable fraction

Method : With reference to 21 CFR 177.1520 (d)(3)(ii). Sample preparation in n-hexane at 50°C for 2 hours.

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	1		
Extractable fraction	0.7	0.1	5.5
Comment	PASS	--	--

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	2		
Extractable fraction	1.6	0.1	5.5
Comment	PASS	--	--

Sample Description :

1. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037) (D1)
2. Blue plastic (Crux reservoir cap) (3-1664-firstshot) (H1)

Note : 1. % w/w = percentage of weight by weight

2. ND = Not Detected

3. °C = degree Celsius

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c) Soluble fraction

Method : With reference to 21 CFR 177.1520 (d)(4)(ii). Sample preparation in xylene at 25°C.

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	1		
Soluble fraction	17.3	0.1	30.0
Comment	PASS	--	--

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	2		
Soluble fraction	8.1	0.1	30.0
Comment	PASS	--	--

Sample Description :

1. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037) (D1)
2. Blue plastic (Crux reservoir cap) (3-1664-firstshot) (H1)

- Note :
1. % w/w = percentage of weight by weight
 2. ND = Not Detected
 3. °C = degree Celsius

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2) Polyethylene

a) Density

Method : With reference to 21 CFR 177.1520 d(1) or ASTM D792:2008, determined at 23°C.

Test Item	Result (g/mL)	Permissible Limit (g/mL)
	1	
Density at 23°C	0.91	0.85 – 1.00
Comment	PASS	--

Sample Description :

1. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039) (D3)

Note : g/mL = gram per milliliter

b) Extractable fraction

Method : With reference to 21 CFR 177.1520 (d)(3)(ii). Sample preparation in n-hexane at 50°C for 2 hours.

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	1		
Extractable fraction	1.9	0.1	5.5
Comment	PASS	--	--

Sample Description :

1. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039) (D3)

Note : 1. % w/w = percentage of weight by weight

2. ND = Not Detected

3. °C = degree Celsius

c) Soluble fraction

Method : With reference to 21 CFR 177.1520 (d)(4)(ii). Sample preparation in xylene at 25°C.

Test Item	Result (% w/w)	Reporting Limit (% w/w)	Permissible Limit (% w/w)
	1		
Soluble fraction	2.5	0.1	11.3
Comment	PASS	--	--

Sample Description :

1. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039) (D3)

Note : 1. % w/w = percentage of weight by weight

2. ND = Not Detected
3. °C = degree Celsius

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5. US FDA 21 CFR 177.1210 (Closure with Sealing Gaskets) – Determination of Amount of Net Chloroform Soluble Extractives

Method : With reference to US FDA 21 CFR 177.1210.

For preformed overall discs or annular rings from plasticized polymers including unvulcanized rubber :

Extractants	Test Condition	Result (ppm)	Reporting Limit (ppm)	Permissible Limit (ppm)
		1		
Distilled Water	120°F for 24 hours	ND	5	50
Comment	--	PASS	--	--

Extractants	Test Condition	Result (ppm)	Reporting Limit (ppm)	Permissible Limit (ppm)
		2		
Distilled Water	120°F for 24 hours	ND	5	50
Comment	--	PASS	--	--

Sample Description :

1. Grey plastic (Crux cap trim and seal) (3-1664-TPE) (H2)
2. Black rubber (Exit port coupler o-ring) (101506402-o-ring) (K5)

Note : 1. ppm = parts per million
 2. °F = degrees Fahrenheit
 3. ND = Not Detected

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6. European Regulation (EC) No. 1907/2006 (REACH) Annex XVII and its amendment (EU) 2018/2005 – Phthalate content (As per client's request)

Method: With reference to CPSC-CH-C1001-09.4

Analysis was performed by Gas Chromatography Mass Spectrometer (GC-MS) / High Performance Liquid Chromatography with Mass Spectrometer (HPLC-MS)

Materials can be placed in the mouth for toys & childcare articles

Test Item(s)	CAS No.	Result (s) (%)			MDL (%)	Reference Limit (%)
Specimen No.	--	1	2	3		
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	85-68-7	ND	ND	ND	0.003	0.1
Di-(2-ethyl hexyl) phthalate (DEHP) / Dioctyl Phthalate (DOP)	117-81-7	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	0.010	--
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	0.010	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	0.003	0.1
Total (DBP+BBP+DEHP+DIBP)		ND	ND	ND	--	0.1
Total (DINP+DNOP+DIDP)		ND	ND	ND	--	0.1

Test Item(s)	CAS No.	Result (s) (%)			MDL (%)	Reference Limit (%)
Specimen No.	--	4	5	6		
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	85-68-7	ND	ND	ND	0.003	0.1
Di-(2-ethyl hexyl) phthalate (DEHP) / Dioctyl Phthalate (DOP)	117-81-7	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	0.010	--
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	0.010	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	0.003	0.1
Total (DBP+BBP+DEHP+DIBP)		ND	ND	ND	--	0.1
Total (DINP+DNOP+DIDP)		ND	ND	ND	--	0.1

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Test Item(s)	CAS No.	Result (s) (%)			MDL (%)	Reference Limit (%)
Specimen No.	--	7	8	9		
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	85-68-7	ND	ND	ND	0.003	0.1
Di-(2-ethyl hexyl) phthalate (DEHP) / Dioctyl Phthalate (DOP)	117-81-7	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	0.010	--
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	0.010	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	0.003	0.1
Total (DBP+BBP+DEHP+DIBP)		ND	ND	ND	--	0.1
Total (DINP+DNOP+DIDP)		ND	ND	ND	--	0.1

Test Item(s)	CAS No.	Result (s) (%)			MDL (%)	Reference Limit (%)
Specimen No.	--	10	11	12		
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	85-68-7	ND	ND	ND	0.003	0.1
Di-(2-ethyl hexyl) phthalate (DEHP) / Dioctyl Phthalate (DOP)	117-81-7	ND	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	0.010	--
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	0.010	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	0.003	0.1
Total (DBP+BBP+DEHP+DIBP)		ND	ND	ND	--	0.1
Total (DINP+DNOP+DIDP)		ND	ND	ND	--	0.1

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Test Item(s)	CAS No.	Result (s) (%)		MDL (%)	Reference Limit (%)
Specimen No.	--	13	14		
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	0.003	0.1
Benzylbutyl Phthalate (BBP)	85-68-7	ND	ND	0.003	0.1
Di-(2-ethyl hexyl) phthalate (DEHP) / Dioctyl Phthalate (DOP)	117-81-7	ND	ND	0.003	0.1
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	0.010	--
Di-n-octyl Phthalate (DNOP)	117-84-0	ND	ND	0.003	--
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	0.010	--
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	0.003	0.1
Total (DBP+BBP+DEHP+DIBP)		ND	ND	--	0.1
Total (DINP+DNOP+DIDP)		ND	ND	--	0.1

Specimen Description:

1. Semi-transparent blue silicone rubber (Big bite valve) (100690406)
2. Transparent blue plastic (Hydration tube) (101536401)
3. Blue plastic (Tubing coupler body) (101507401-body)
4. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037)
5. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039)
6. Semi-transparent blue plastic (Crux 3L reservoir body) (101563401)
7. Blue plastic (Crux reservoir cap) (3-1664-firstshot)
8. Grey plastic (Crux cap trim and seal) (3-1664-TPE)
9. Blue plastic (Fill Port) (3-1700)
10. Blue plastic (Exit port Fitment) (3-0884)
11. Blue plastic (Exit port coupler body) (101506402-body)
12. Off white plastic (Exit port coupler valve) (101506402-valve)
13. Black rubber (Exit port coupler o-ring) (101506402-o-ring)
14. Blue plastic (SEP Standard exit port) (3-2157)

- Note:
- ND = Not Detected (lower than MDL)
 - MDL = Method Detection Limit
 - % = percentage by weight

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7. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and Technical Guide on Metals and alloys used in food contact materials of Council of Europe Resolution CM/Res(2013)9.
a) Metal / Metallic Coating – Extractable Heavy Metals

Method :Sample preparation in artificial tap water at 40°C for 24 hours with reference to EN13130-1:2004 for selection of test method, followed by analysis using Inductively Coupled Argon Plasma Spectrometry (ICP) and Inductively coupled plasma-mass spectrometry (ICP-MS).

Test Item	Unit	Migration Result		Reporting Limit	7 x SRL	Specific Release Limit (SRL)
		1				
		1 st + 2 nd Migration	3 rd Migration			
Surface area to volume ratio	dm ² /kg	6	6	--	--	--
Aluminium (Al)	mg/kg	ND	ND	0.2	35	5
Antimony (Sb)	mg/kg	ND	ND	0.02	0.28	0.04
Arsenic (As)	mg/kg	ND	ND	0.001	0.014	0.002
Barium (Ba)	mg/kg	ND	ND	0.25	8.4	1.2
Beryllium (Be)	mg/kg	ND	ND	0.005	0.07	0.01
Cadmium (Cd)	mg/kg	ND	ND	0.002	0.035	0.005
Chromium (Cr)	mg/kg	ND	ND	0.1	1.75	0.25
Cobalt (Co)	mg/kg	ND	ND	0.01	0.14	0.02
Copper (Cu)	mg/kg	ND	ND	0.1	28	4
Iron (Fe)	mg/kg	ND	ND	0.25	280	40
Lead (Pb)	mg/kg	ND	ND	0.005	0.07	0.01
Lithium (Li)	mg/kg	ND	ND	0.02	0.336	0.048
Manganese (Mn)	mg/kg	ND	ND	0.25	12.6	1.8
Mercury (Hg)	mg/kg	ND	ND	0.002	0.021	0.003
Molybdenum (Mo)	mg/kg	ND	ND	0.02	0.84	0.12
Nickel (Ni)	mg/kg	ND	ND	0.05	0.98	0.14
Silver (Ag)	mg/kg	ND	ND	0.03	0.56	0.08
Thallium (Tl)	mg/kg	ND	ND	0.0001	0.0007	0.0001
Tin (Sn)	mg/kg	ND	ND	5	700	100
Vanadium (V)	mg/kg	ND	ND	0.005	0.07	0.01
Zinc (Zn)	mg/kg	ND	ND	1	35	5
Comment		PASS		--	--	--

Specimen Description:

1. Silvery metal (Exit port coupler spring) (K4)

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- Note:
1. mg/kg = milligram per kilogram of foodstuff in contact with
 2. °C = degree Celsius
 3. ND = Not Detected
 4. dm²/kg = square decimeter per kilogram
 5. According to Council of Europe Resolution CM/Res(2013)9, the result from 3rd migration shall comply with the Specific Release Limit (SRL) and the sum of 1st and 2nd migration shall not exceed seven times of SRL for repeated use articles

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8. Canada Consumer Product Safety Act (S.C. 2010, c. 21), Consumer Products Containing Lead Regulations, SOR/2018-83 – Total Lead content

Method : With reference to Canada Health Product Safety Bureau, Reference Manual Book 5 - Laboratory Policies and Procedures, Part B: Test Methods Section, Method C02.2.2:2020 / C02.3.2:2021 / C02.4.1:2019 Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test Item(s)	Lead (Pb)
MDL (mg/kg)	10
Permissible Limit (mg/kg)	90
Specimen Description	Result(s) (mg/kg)
1. Semi-transparent blue silicone rubber (Big bite valve) (100690406)	ND
2. Transparent blue plastic (Hydration tube) (101536401)	ND
3. Blue plastic (Tubing coupler body) (101507401-body)	ND
4. Blue plastic (Body, 45deg hydrolock valve, blue) (3-2037)	ND
5. Grey plastic (Barrel 45deg hydrolock valve, grey) (3-2039)	ND
6. Semi-transparent blue plastic (Crux 3L reservoir body) (101563401)	ND
7. Blue plastic (Crux reservoir cap) (3-1664-firstshot)	ND
8. Grey plastic (Crux cap trim and seal) (3-1664-TPE)	ND
9. Blue plastic (Fill Port) (3-1700)	ND
10. Blue plastic (Exit port Fitment) (3-0884)	ND
11. Blue plastic (Exit port coupler body) (101506402-body)	ND
12. Off white plastic (Exit port coupler valve) (101506402-valve)	ND
13. Black rubber (Exit port coupler o-ring) (101506402-o-ring)	ND
14. Blue plastic (SEP Standard exit port) (3-2157)	ND

- Note:
- mg/kg = milligram per kilogram
 - ND = Not Detected (lower than MDL)
 - MDL = Method Detection Limit

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Remark:

When statement of conformity is made, unless inherent in the requested specification or instructed by the applicant, the decision rule would be based on the non-binary statement with guard band (is equal to the expanded measurement uncertainty with a 95% coverage probability, $w = U_{95}$) in ILAC-G8:09/2019 Clause 4.2.3.

“Pass - the measured value is within (or below / above) the acceptance limit, where the acceptance limit is below / above to the guard band.” or “Pass - The measured values were observed in tolerance at the points tested. The specific false accept risk is up to 2.5%.”.

“Fail - the measured value is out of (or below / above) the tolerance limit added / subtracted to the guard band.” or “Fail - One or more measured values were observed out of tolerance at the points tested”. The specific false reject risk is up to 2.5%.

“Inconclusive – It is not possible to state the conformity. Either one or more measured values were observed in the portion of the expanded measurement uncertainty intervals at the points tested where the specific risk is up to 50%.”

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Sample Photo:

Pic.1



Pic.2



SGS authenticate the photo on original report only

*** End of Report ***

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