



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 1 of 13

Applicant : Arovast Corporation

Applicant Address : 1202 N Miller St. Suite A, Anaheim, CA 92806, USA

The following sample was submitted by the client as:

Product Name : Air Fryer

Style/Item No. : CP158-AF, CP137-AF

Sample Receiving Date : Aug 24, 2018, Sep 17, 2018

Testing Period : Aug 24, 2018 – Sep 25, 2018

Test Requested : Pb,Cd,Cr(VI),Hg,PBBs, PBDEs content by XRF

Test Results : Details, please refer to the following pages.

Signed for and on behalf of
Eco-industrial and Environmental Test Center

Grace Sheng
Technical Supervisor



Declaration:

- (1) The report shall not be reproduced partly without the written approval of the laboratory, except in full produced.
- (2) All the results shown in the report apply to the tested sample, any erasion on the report is invalid
- (3) All tested sample will be kept for one month, if there is any doubt about the test result, please inform within this period



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 2 of 13

Tested components:

No.	Sample Description	No.	Sample Description
(1)	Black rubber damper	(23)	Black plastic
(2)	Black plastic shell	(24)	Plastic shell
(3)	Black plastic	(25)	Aluminum inner plate
(4)	Transparent plastic	(26)	Line card adhesive
(5)	Screw	(27)	Line card soft apron
(6)	Screw	(28)	Blue wire jacket
(7)	Screw	(29)	Yellow wire jacket
(8)	Panel plastic sheet	(30)	Brown wire jacket
(9)	Plastic shell	(31)	Wire core
(10)	pot	(32)	Black line skin
(11)	Screw	(33)	Plug plastic
(12)	Nut	(34)	Metal sheet
(13)	Silver metal	(35)	Metal plug
(14)	Pan	(36)	White plastic bushing
(15)	Transparent plastic shell	(37)	terminal
(16)	Screw	(38)	Control box white plastic
(17)	Gasket	(39)	Digital display module
(18)	Handle plastic	(40)	LED
(19)	Black plastic	(41)	Cable plug material
(20)	Silvery metal	(42)	Cable plug terminal
(21)	Metal contact	(43)	Cable wire jacket
(22)	Spring	(44)	Wire core



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 3 of 13

Tested components:

No.	Sample Description	No.	Sample Description
(45)	White slot	(67)	Electrolytic capacitor 470uF10V
(46)	Electrolytic capacitor 10V220uF	(68)	Electrolytic capacitor 4.7uF450V
(47)	IC TM1640	(69)	Field effect tube
(48)	IC BS86D20A	(70)	IC1823A
(49)	Diode	(71)	IC1823A
(50)	Chip resistance	(72)	ICPN8016
(51)	Chip capacitance	(73)	
(52)	Glass fiber tube	(74)	Chip resistance
(53)	PCB	(75)	Chip capacitance
(54)	Solder	(76)	PCB
(55)	Relay	(77)	Red wire jacket
(56)	Buzzer	(78)	Blue wire jacket
(57)	Yellow capacitance	(79)	Blue thin wire jacket
(58)	Black capacitance	(80)	Wire core
(59)	Inductor skin	(81)	Black plug plastic
(60)	Inductance	(82)	Switch black plastic
(61)	Enameled wire	(83)	Switch black plastic
(62)	Green resistance	(84)	Switch metal sheet
(63)	Grey resistance	(85)	Switch black spring
(64)	Blue capacitance	(86)	Black cannula
(65)	White slots	(87)	Yellow wire jacket
(66)	Black glue	(88)	Terminal



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 4 of 13

Tested components:

No.	Sample Description	No.	Sample Description
(89)	Red wire jacket	(104)	Transformer white skeleton
(90)	Blue wire jacket	(105)	Black plug plastic
(91)	Transparent casing	(106)	Red wire jacket
(92)	terminal	(107)	Blue wire jacket
(93)	Glass fiber tube	(108)	Label
(94)	Transparent rubber tube	(109)	Black tape
(95)	Heat shrinkable tube	(110)	Enameled wire
(96)	Motor metal frame	(111)	Fuse
(97)	Screw	(112)	Temperature sensor
(98)	Metal axis	(113)	Heating coil
(99)	Sheet metal	(114)	Heat shrinkable tube
(100)	Copper wire	(115)	Fan black case
(101)	Fan blade	(116)	Metal sheet
(102)	Aluminum sheet	(117)	Wire core
(103)	Nut		



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 5 of 13

(A) The test results of XRF:

Tested Items	Results									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	D*	BL	BL	BL	BL
Bromine(Br)	BL	BL	D*	BL	--	--	--	BL	D*	--

Tested Items	Results									
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	D*	BL	BL	BL	BL	D*	D*	BL	BL	BL
Bromine(Br)	--	--	--	--	BL	--	--	D*	BL	--

Tested Items	Results									
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	--	--	BL	BL	--	BL	BL	BL	BL	BL

Tested Items	Results									
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Lead (Pb)	BL	BL	BL	BL	OL*	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	--	BL	BL	--	--	D*	--	BL	D*	BL



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 6 of 13

(A) The test results of XRF:

Tested Items	Results									
	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	--	BL	--	BL	BL	BL	BL	D*	BL

Tested Items	Results									
	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	BL	D*	--	D*	D*	D*	D*	BL	BL

Tested Items	Results									
	(61)	(62)	(63)	(64)	(65)	(66)	(67)	(68)	(69)	(70)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	--	BL								

Tested Items	Results									
	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	BL	D*	BL	BL	D*	BL	BL	BL	--



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 7 of 13

(A) The test results of XRF:

Tested Items	Results									
	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	D*	D*	--	--	BL	BL	--	BL	BL

Tested Items	Results									
	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	--	BL	BL	BL	--	--	--	--	--

Tested Items	Results									
	(101)	(102)	(103)	(104)	(105)	(106)	(107)	(108)	(109)	(110)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	D*	D*	BL							
Bromine(Br)	--	--	--	BL	BL	BL	BL	BL	BL	--

Tested Items	Results						
	(111)	(112)	(113)	(114)	(115)	(116)	(117)
Lead (Pb)	BL	BL	BL	BL	BL	BL	BL
Cadmium(Cd)	BL	BL	BL	BL	BL	BL	BL
Mercury(Hg)	BL	BL	BL	BL	BL	BL	BL
Chromium(Cr)	BL	BL	BL	BL	BL	BL	BL
Bromine(Br)	BL	BL	--	BL	BL	--	--



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 8 of 13

Note:

BL = below limit by XRF analysis

OL = over limit by XRF analysis

D = Detected (questionable, need further chemical analysis)

* = The screened result was found by XRF and further chemical test was suggested.

Remark: (1) It is the result on total Br while test PBBs and PBDEs by EDXRF. It is the result on total Cr while test Hexavalent Chromium by EDXRF.

(2) Results are obtained by EDXRF for primary screening, and chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321 Ed 1.0

(Unit:mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	BL $\leq 70-3\sigma < D < 130+3\sigma \leq OL$	BL $\leq 70-3\sigma < D < 130+3\sigma \leq OL$	BL $\leq 50-3\sigma < D < 150+3\sigma \leq OL$
Pb	BL $\leq 700-3\sigma < D < 1300+3\sigma \leq OL$	BL $\leq 700-3\sigma < D < 1300+3\sigma \leq OL$	BL $\leq 500-3\sigma < D < 1500+3\sigma \leq OL$
Hg	BL $\leq 700-3\sigma < D < 1300+3\sigma \leq OL$	BL $\leq 700-3\sigma < D < 1300+3\sigma \leq OL$	BL $\leq 500-3\sigma < D < 1500+3\sigma \leq OL$
Cr	BL $\leq 700-3\sigma < D$	BL $\leq 700-3\sigma < D$	BL $\leq 500-3\sigma < D$
Br	BL $\leq 300-3\sigma < D$	----	BL $\leq 250-3\sigma < D$

(B) The test results of chemical method:

(1) The test results of Lead (Pb):

Test Item	Results (mg/kg)
	(35)
Lead (Pb)	26670**

(2) The test results of Cr(VI):

Test Item	Result(mg/kg)			
	(6)	(11)	(16)	(17)
Chromium (VI)(Cr ⁶⁺) result	ND	ND	ND	ND

Test Item	Result(mg/kg)			
	(97)	(98)	(101)	(103)
Chromium (VI)(Cr ⁶⁺) result	ND	ND	ND	ND



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 9 of 13

(3) The test results of PBBs & PBDEs:

Testing Item	Results				
	(3)	(9)	(18)	(36)	(39)
Sum of polybrominated biphenyls (PBBs)(mg/kg)	ND	ND	ND	ND	ND
Monobromobiphenyl (MonoBB)	ND	ND	ND	ND	ND
Dibromobiphenyl (DiBB)	ND	ND	ND	ND	ND
Tribromobiphenyl (TriBB)	ND	ND	ND	ND	ND
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	ND	ND
Pentabromobiphenyl (PentaBB)	ND	ND	ND	ND	ND
Hexabromobiphenyl (HexaBB)	ND	ND	ND	ND	ND
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	ND	ND
Octabromobiphenyl (OctaBB)	ND	ND	ND	ND	ND
Nonabromobiphenyl (NonaBB)	ND	ND	ND	ND	ND
Decabromobiphenyl (DecaBB)	ND	ND	ND	ND	ND
Sum of polybrominated diphenyl ethers (PBDEs)(mg/kg)	ND	ND	ND	ND	ND
Monobromodiphenyl ether (MonoBDE)	ND	ND	ND	ND	ND
Dibromodiphenyl ether (DiBDE)	ND	ND	ND	ND	ND
Tribromodiphenyl ether (TriBDE)	ND	ND	ND	ND	ND
Tetrabromodiphenyl ether (TetraBDE)	ND	ND	ND	ND	ND
Pentabromodiphenyl ether (PentaBDE)	ND	ND	ND	ND	ND
Hexabromodiphenyl ether (HexaBDE)	ND	ND	ND	ND	ND
Heptabromodiphenyl ether (HeptaBDE)	ND	ND	ND	ND	ND
Octabromodiphenyl ether (OctaBDE)	ND	ND	ND	ND	ND
Nonabromodiphenyl ether (NonaBDE)	ND	ND	ND	ND	ND
Decabromodiphenyl ether (DecaBDE)	ND	ND	ND	ND	ND



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 10 of 13

(3) The test results of PBBs & PBDEs:

Testing Item	Results				
	(49)	(53)	(55)	(56)	(57)
Sum of polybrominated biphenyls (PBBs)(mg/kg)	ND	ND	ND	ND	ND
Monobromobiphenyl (MonoBB)	ND	ND	ND	ND	ND
Dibromobiphenyl (DiBB)	ND	ND	ND	ND	ND
Tribromobiphenyl (TriBB)	ND	ND	ND	ND	ND
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	ND	ND
Pentabromobiphenyl (PentaBB)	ND	ND	ND	ND	ND
Hexabromobiphenyl (HexaBB)	ND	ND	ND	ND	ND
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	ND	ND
Octabromobiphenyl (OctaBB)	ND	ND	ND	ND	ND
Nonabromobiphenyl (NonaBB)	ND	ND	ND	ND	ND
Decabromobiphenyl (DecaBB)	ND	ND	ND	ND	ND
Sum of polybrominated diphenyl ethers (PBDEs)(mg/kg)	ND	ND	ND	ND	ND
Monobromodiphenyl ether (MonoBDE)	ND	ND	ND	ND	ND
Dibromodiphenyl ether (DiBDE)	ND	ND	ND	ND	ND
Tribromodiphenyl ether (TriBDE)	ND	ND	ND	ND	ND
Tetrabromodiphenyl ether (TetraBDE)	ND	ND	ND	ND	ND
Pentabromodiphenyl ether (PentaBDE)	ND	ND	ND	ND	ND
Hexabromodiphenyl ether (HexaBDE)	ND	ND	ND	ND	ND
Heptabromodiphenyl ether (HeptaBDE)	ND	ND	ND	ND	ND
Octabromodiphenyl ether (OctaBDE)	ND	ND	ND	ND	ND
Nonabromodiphenyl ether (NonaBDE)	ND	ND	ND	ND	ND
Decabromodiphenyl ether (DecaBDE)	ND	ND	ND	ND	ND



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 11 of 13

(3) The test results of PBBs & PBDEs:

Testing Item	Results				
	(58)	(73)	(76)	(82)	(83)
Sum of polybrominated biphenyls (PBBs)(mg/kg)	ND	ND	ND	ND	ND
Monobromobiphenyl (MonoBB)	ND	ND	ND	ND	ND
Dibromobiphenyl (DiBB)	ND	ND	ND	ND	ND
Tribromobiphenyl (TriBB)	ND	ND	ND	ND	ND
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	ND	ND
Pentabromobiphenyl (PentaBB)	ND	ND	ND	ND	ND
Hexabromobiphenyl (HexaBB)	ND	ND	ND	ND	ND
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	ND	ND
Octabromobiphenyl (OctaBB)	ND	ND	ND	ND	ND
Nonabromobiphenyl (NonaBB)	ND	ND	ND	ND	ND
Decabromobiphenyl (DecaBB)	ND	ND	ND	ND	ND
Sum of polybrominated diphenyl ethers (PBDEs)(mg/kg)	ND	ND	ND	ND	ND
Monobromodiphenyl ether (MonoBDE)	ND	ND	ND	ND	ND
Dibromodiphenyl ether (DiBDE)	ND	ND	ND	ND	ND
Tribromodiphenyl ether (TriBDE)	ND	ND	ND	ND	ND
Tetrabromodiphenyl ether (TetraBDE)	ND	ND	ND	ND	ND
Pentabromodiphenyl ether (PentaBDE)	ND	ND	ND	ND	ND
Hexabromodiphenyl ether (HexaBDE)	ND	ND	ND	ND	ND
Heptabromodiphenyl ether (HeptaBDE)	ND	ND	ND	ND	ND
Octabromodiphenyl ether (OctaBDE)	ND	ND	ND	ND	ND
Nonabromodiphenyl ether (NonaBDE)	ND	ND	ND	ND	ND
Decabromodiphenyl ether (DecaBDE)	ND	ND	ND	ND	ND

Note : mg/kg = milligram per kilogram

ND = Not detected

** = As claimed by the declaration submitted from the applicant, the lead content of components (35) is coming from copper alloy only. According to EU RoHS directive (2011/65/EU) annex III,, lead as an alloying element in copper alloy can be containing up to 4%(40,000ppm) lead by weight.



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 12 of 13

(C) Chemical test method:

Testing item	Testing method	Reporting limit
Lead (Pb) content	IEC62321-5:2013 Determination of certain substances in electrotechnical products –Part 5: Cadmium, lead and chromium in polymers and electronics and cadmium and lead in metals by AAS, AFS, ICP-OES and ICP-MS	5 mg/kg
Chromium (VI) (Cr ⁶⁺) content (for metal)	IEC 62321-7-1:2015 Determination of certain substances in electrotechnical products - Part 7-1: Hexavalent chromium - Presence of hexavalent chromium (Cr(VI)) in colourless and coloured corrosion-protected coatings on metals by the colorimetric method	0.02 mg/kg (50cm ²)
polybrominated biphenyls (PBBs)& polybrominated diphenyl ethers (PBDEs)	IEC 62321-6:2015, by solvent extraction and determined by GC/MS.	5 mg/kg

(D) RoHS requirement:

Restricted substances	Limits
Cadmium (Cd)	0.01% (100 ppm)
Lead (Pb)	0.1% (1000 ppm)
Mercury (Hg)	0.1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	0.1% (1000 ppm)
Polybrominated biphenyls (PBBs)	0.1% (1000 ppm)
Polybrominated diphenyl ethers (PBDEs)	0.1% (1000 ppm)

The above limits were quoted from 2011/65/EU for homogeneous material.



TEST REPORT

Report No: SZ1805246

Date: Sep 25, 2018

Page 13 of 13

(E) Tested samples photos:



--- End of Report ---