



中国认可
国际互认
检测
TESTING
CNAS L11379

TEST REPORT

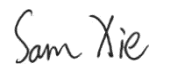
Company Name Sichuan Tianao Environmental Protection Technology Co., Ltd
Shown on Report:
Address: Hebei-Pingwu Industrial Park, Mianyang, Sichuan Province

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Name: 电子水泵
Sample Model: EP250/EP600
Trademark: TIO
Brand 田奥科技
Manufacturer: Sichuan Tianao Environmental Protection Technology Co., Ltd
Address: Hebei-Pingwu Industrial Park, Mianyang, Sichuan Province
Sample Received Date: May 14, 2026
Test Period: May 14, 2026 - Jun.02, 2026
Date of Issue: Jun.11, 2026

ISSUED BY: Guangdong Ti Cobo Testing Co., Ltd.



Editor: Mia **Checked by:** Cd lan **Approved by:** Sam Xie
  

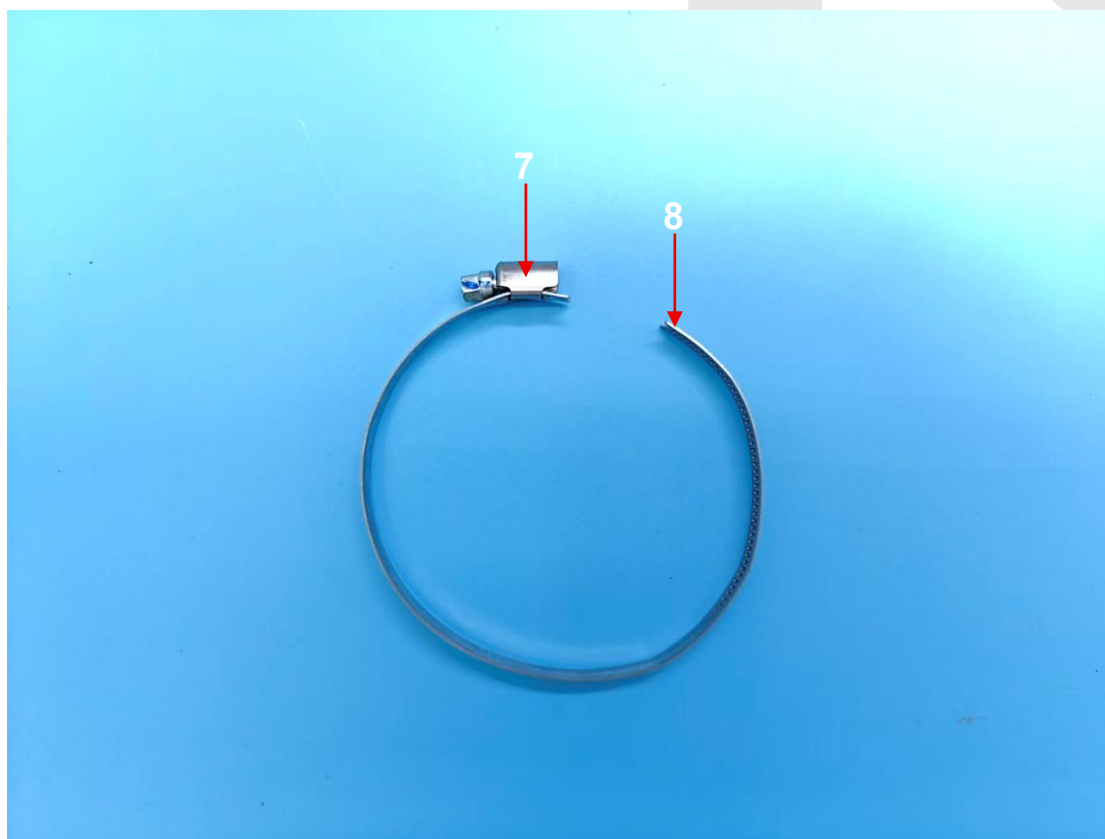
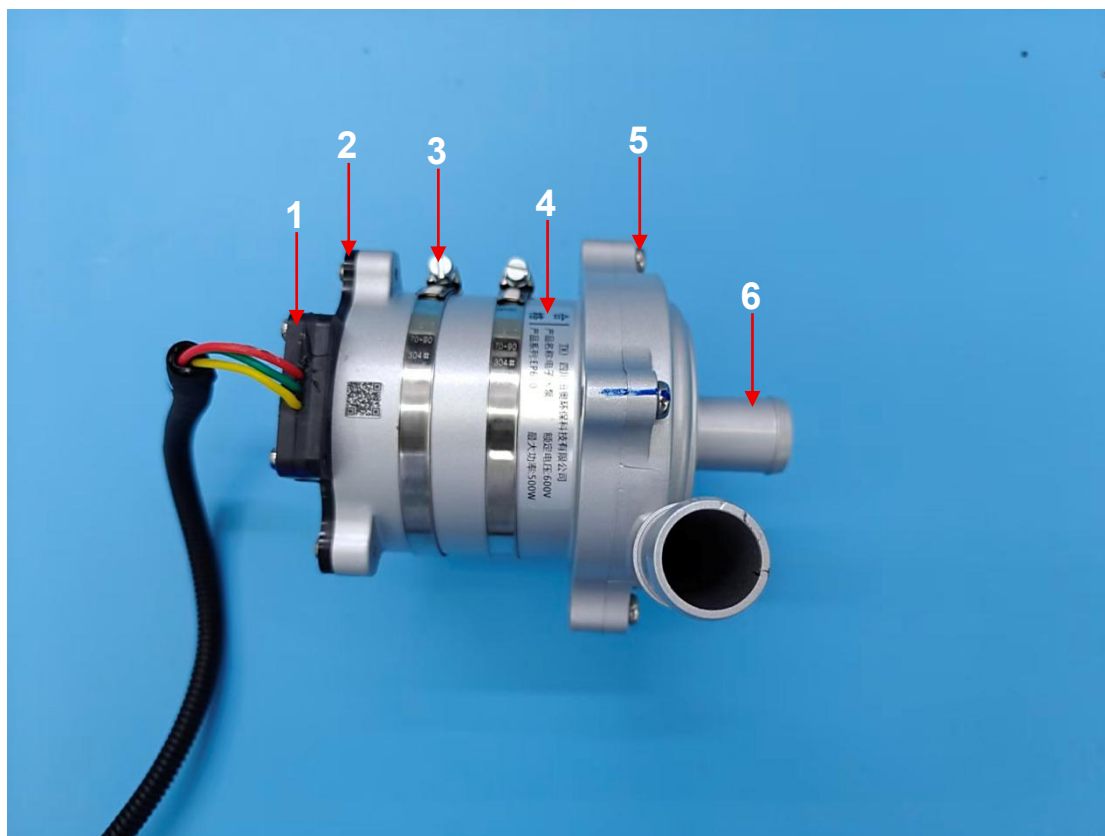
1. Test Requested and Test Conclusion:

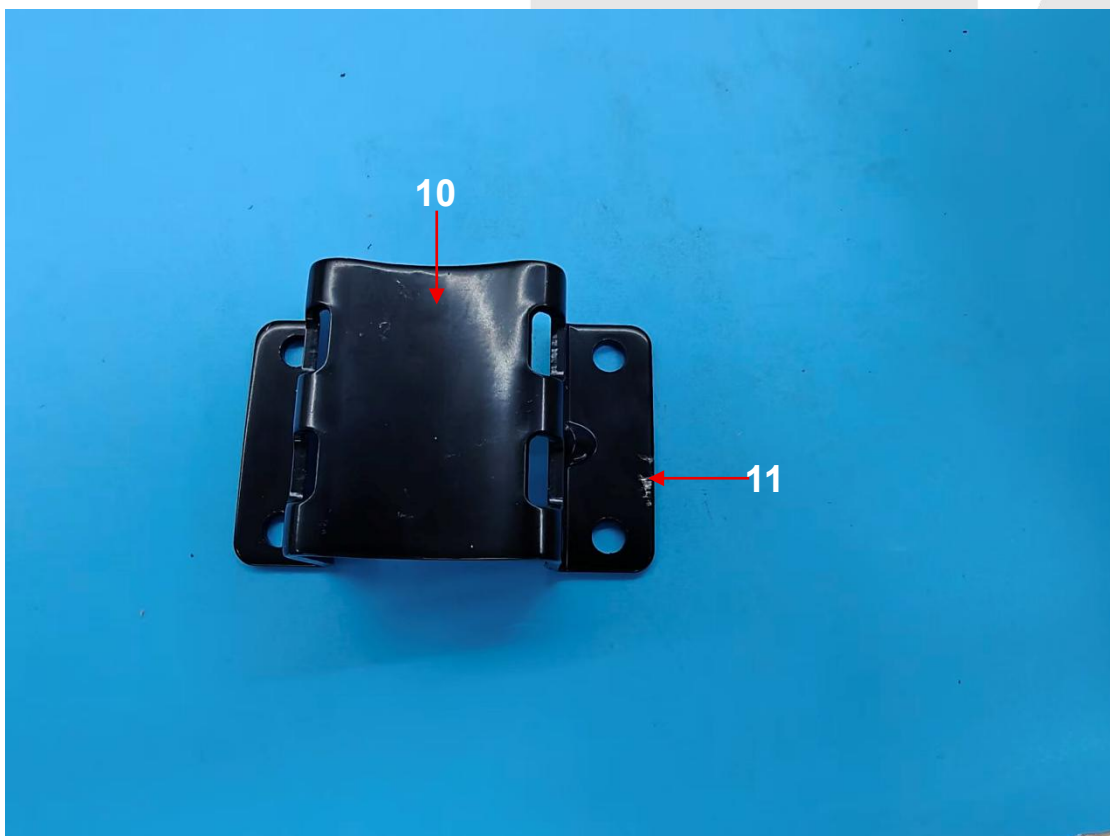
Based on the performed tests on submitted sample(s).

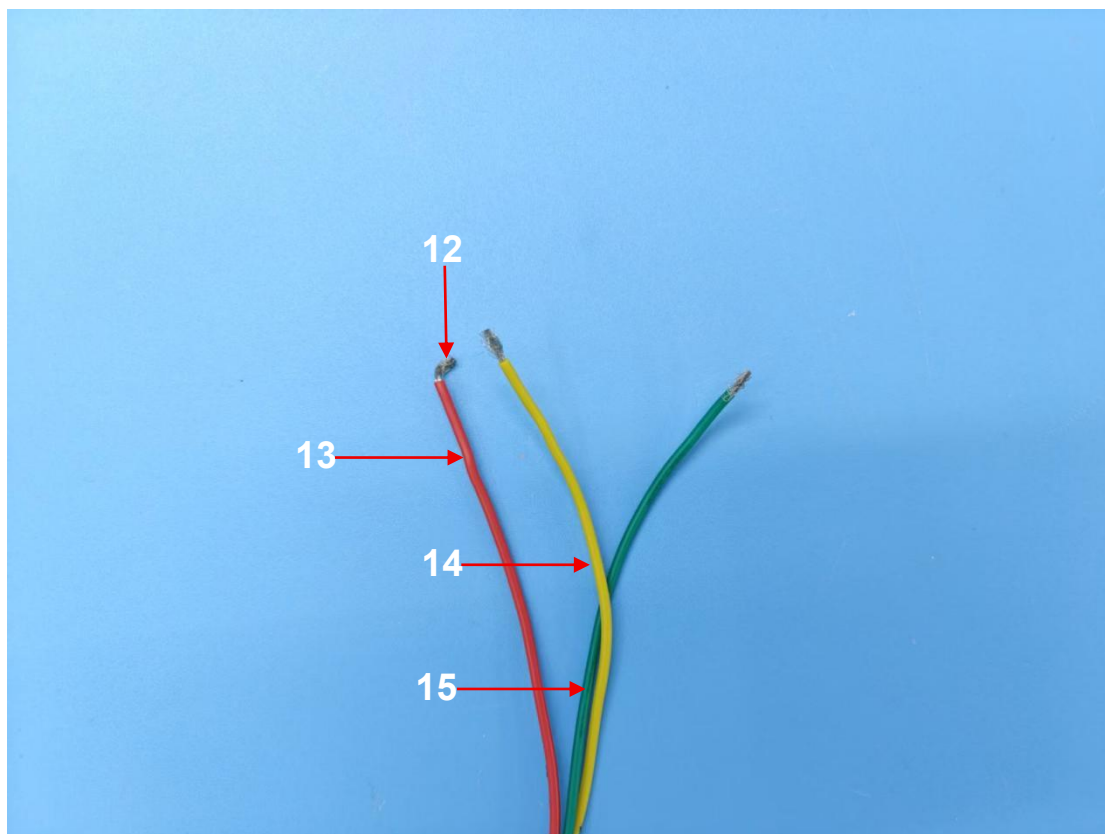
Test items	Conclusion
RoHS Directive 2011/65/EU Revised instructions (EU) 2015/863 of the European parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment	
– Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Hexavalent Chromium(Cr ⁶⁺) content.	PASS
– Polybrominated biphenyls (PBBs) & Polybrominated diphenyl ethers (PBDEs) content.	PASS
– Di-(2-ethylhexyl) phthalate (DEHP), Dibutyl phthalate (DBP), Butyl benzyl phthalate (BBP), Diisobutyl phthalate (DIBP) content	PASS

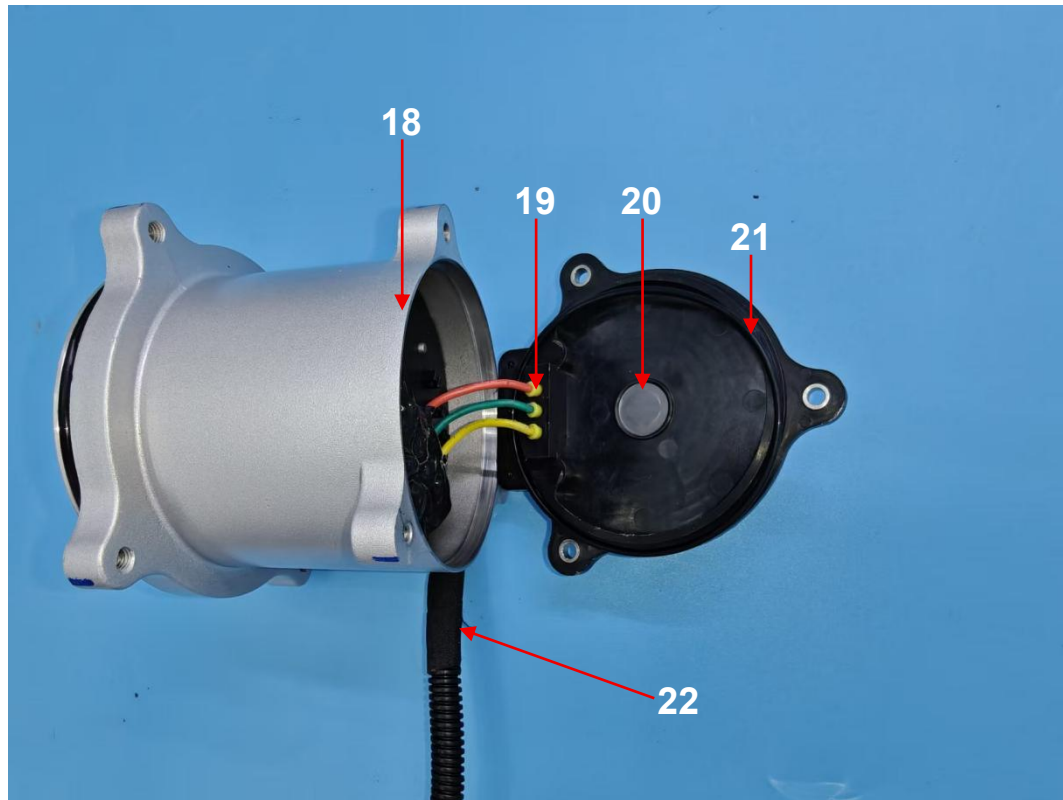


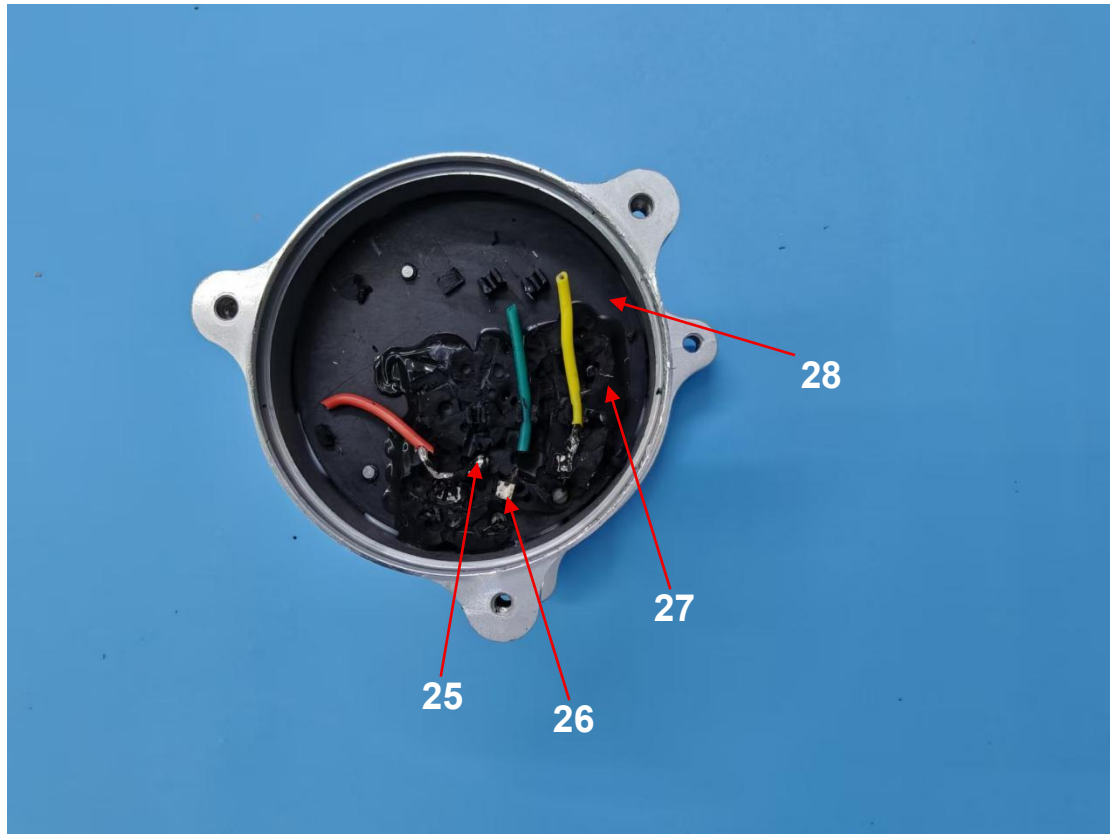
Sample photo list--A

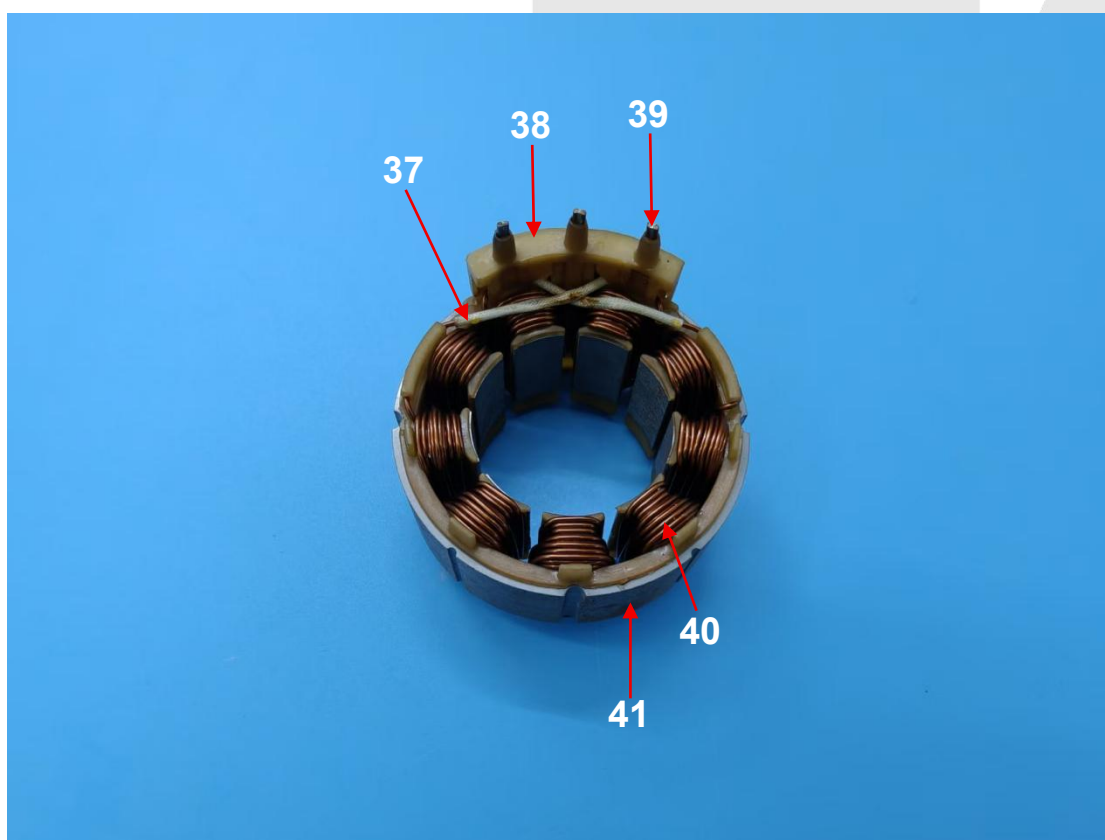
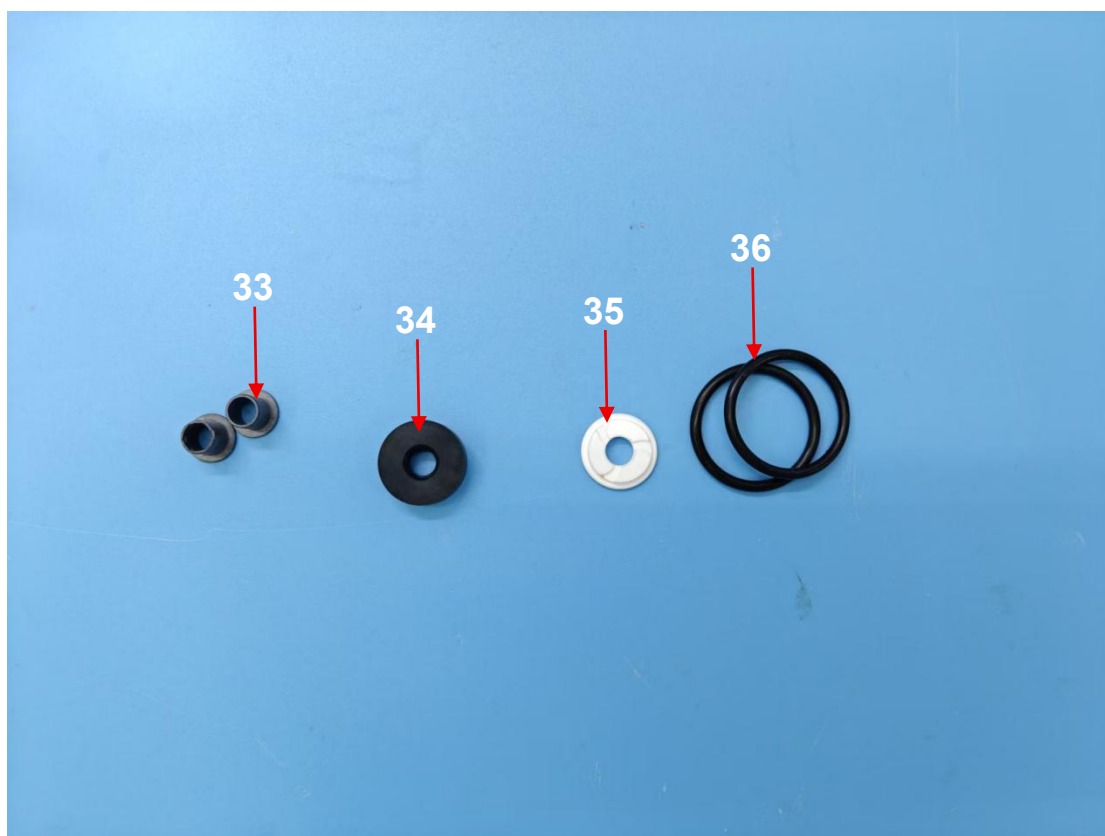












Sample photo list--B



2. Sample description

Sample No.	Description
A1	Black plastic
A2	Black plastic
A3	Silvery metal
A4	Black printing with silvery plastic
A5	Silvery metal
A6	Silvery metal
A7	Silvery metal
A8	Silvery metal
A9	Silvery metal
A10	Black coating
A11	Silvery metal
A12	Silvery metal
A13	Red soft plastic
A14	Yellow soft plastic
A15	Green soft plastic
A16	Silvery metal
A17	Black plastic
A18	Silvery metal
A19	Yellow soft plastic
A20	Gary soft plastic
A21	Black soft plastic
A22	Black fabric
A23	Black plastic
A24	Black soft plastic
A25	Soldering tin
A26	White ceramics
A27	Black glue
A28	Black plastic
A29	Silvery metal
A30	Silvery magnet
A31	Black plastic
A32	Silvery metal
A33	Gray plastic
A34	Black soft plastic
A35	White plastic
A36	Black soft plastic
A37	White fiberglass tube

A38	Brown plastic
A39	Soldering tin
A40	Coppery metal
A41	Silvery metal
B1	Black plastic
B2	Silvery metal



3. Test Result(s)

3.1 Screening Test

Test Method: With reference to IEC 62321-3-1:2013, Screening –Lead (Pb)/ Cadmium(Cd)/ Mercury(Hg)/ Total Chromium(Cr)/ Total Bromine by X-ray fluorescence spectrometry.

Test Item	Total Chromium (Cr)	Cadmium (Cd)	Total Bromine (Br)	Mercury (Hg)	Lead (Pb)
Screening Limit	500mg/kg	70mg/kg	250mg/kg	500mg/kg	500mg/kg
Material No.	XRF Result				
A1	BL	BL	28907 ^a	BL	BL
A2	BL	BL	34379 ^a	BL	BL
A3	85338 ^a	BL	NA	BL	BL
A4	BL	BL	BL	BL	BL
A5	105236 ^a	BL	NA	BL	BL
A6	BL	BL	NA	BL	BL
A7	111582 ^a	BL	NA	BL	BL
A8	116709 ^a	BL	NA	BL	BL
A9	368803 ^a	BL	NA	BL	BL
A10	BL	BL	BL	BL	BL
A11	BL	BL	NA	BL	BL
A12	BL	BL	NA	BL	BL
A13	BL	BL	BL	BL	BL
A14	BL	BL	BL	BL	BL
A15	BL	BL	BL	BL	BL
A16	95399 ^a	BL	NA	BL	BL
A17	BL	BL	934 ^a	BL	BL
A18	BL	BL	NA	BL	BL
A19	BL	BL	BL	BL	BL
A20	BL	BL	609 ^a	BL	BL
A21	BL	BL	BL	BL	BL
A22	BL	BL	BL	BL	BL
A23	BL	BL	BL	BL	BL
A24	BL	BL	BL	BL	BL
A25	BL	BL	NA	BL	BL
A26	BL	BL	NA	BL	BL
A27	BL	BL	BL	BL	BL
A28	BL	BL	33152 ^a	BL	BL
A29	168703 ^a	BL	NA	BL	BL
A30	BL	BL	NA	BL	BL
A31	BL	BL	BL	BL	BL

A32	BL	BL	NA	BL	BL
A33	BL	BL	BL	BL	BL
A34	BL	BL	BL	BL	BL
A35	BL	BL	BL	BL	BL
A36	BL	BL	BL	BL	BL
A37	BL	BL	NA	BL	BL
A38	BL	BL	BL	BL	BL
A39	BL	Inc ^a	NA	BL	BL
A40	BL	BL	NA	BL	BL
A41	28693 ^a	BL	NA	BL	BL
B1	BL	BL	56685 ^a	BL	BL
B2	1900 ^a	BL	NA	BL	BL

Note:

1. mg/kg = milligram per kilogram.
2. "BL" = Below Screening Limit.
3. "NA" = Not Applicable.
4. "Inc" = Inconclusive.
5. "a" denotes further confirmation test was conducted, results are listed in 3.2 and 3.3.



3.2 Heavy Metal Content

Test Method:

Lead (Pb)/Cadmium(Cd): IEC 62321-5:2013, analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Mercury(Hg): IEC 62321-4:2013+AMD1:2017, analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Hexavalent Chromium(Cr^{6+}): metal: IEC 62321-7-1:2015, nonmetal: IEC 62321-7-2:2017, analysis was performed by Ultraviolet-visible spectroscopy (UV-Vis).

Test Item	Hexavalent Chromium (Cr^{6+})	Hexavalent Chromium (Cr^{6+})	Cadmium (Cd)	Mercury (Hg)	Lead (Pb)
Limit	1000 mg/kg	Negative	100 mg/kg	1000 mg/kg	1000 mg/kg
Material No.	Result				
A3	NA	Negative	--	--	--
A5	NA	Negative	--	--	--
A7	NA	Negative	--	--	--
A8	NA	Negative	--	--	--
A9	NA	Negative	--	--	--
A16	NA	Negative	--	--	--
A29	NA	Negative	--	--	--
A39	--	--	N.D.	--	--
A41	NA	Negative	--	--	--
B2	NA	Negative	--	--	--

- Note:
1. LOQ=Limit of Quantitation: Pb, Cd, Hg: 10mg/kg; Cr^{6+} : nonmetal -10mg/kg, metal- Negative(<0.1 $\mu\text{g}/\text{cm}^2$).
 2. mg/kg = milligram per kilogram, $\mu\text{g}/\text{cm}^2$ = micrograms per square centimeter.
 3. N.D. = Not Detected (< LOQ).
 4. NA = Not Applicable.
 5. Negative = Surface of metal sample absence of Cr^{6+} , Positive = Surface of metal sample presence of Cr^{6+} .
 6. "--" denotes tested by XRF, result is listed in 3.1.

3.3 Polybrominated biphenyls (PBBs) & Polybrominated diphenyl ethers (PBDEs) Content

Test Method: IEC 62321-6:2015, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

Test Item		Limit (mg/kg)	MDL (mg/kg)	Result(mg/kg)				
				A1	A2	A17	A20	A28
PBBs	Monobromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Dibromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Tribromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Tetrabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Pentabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Hexabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Heptabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Octabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Nonabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Decabromobiphenyl	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBBs	1000	--	N.D.	N.D.	N.D.	N.D.	N.D.
PBDEs	Monobromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Dibromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Tribromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Tetrabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Pentabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Hexabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Heptabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Octabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Nonabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Decabromodiphenylether	--	100	N.D.	N.D.	N.D.	N.D.	N.D.
	Sum of detected PBDEs	1000	--	N.D.	N.D.	N.D.	N.D.	N.D.

Test Item		Limit (mg/kg)	MDL (mg/kg)	Result(mg/kg)
				B1
PBBs	Monobromobiphenyl	--	100	N.D.
	Dibromobiphenyl	--	100	N.D.
	Tribromobiphenyl	--	100	N.D.
	Tetrabromobiphenyl	--	100	N.D.
	Pentabromobiphenyl	--	100	N.D.
	Hexabromobiphenyl	--	100	N.D.
	Heptabromobiphenyl	--	100	N.D.
	Octabromobiphenyl	--	100	N.D.
	Nonabromobiphenyl	--	100	N.D.
	Decabromobiphenyl	--	100	N.D.
	Sum of detected PBBs	1000	--	N.D.
PBDEs	Monobromodiphenylether	--	100	N.D.
	Dibromodiphenylether	--	100	N.D.
	Tribromodiphenylether	--	100	N.D.
	Tetrabromodiphenylether	--	100	N.D.
	Pentabromodiphenylether	--	100	N.D.
	Hexabromodiphenylether	--	100	N.D.
	Heptabromodiphenylether	--	100	N.D.
	Octabromodiphenylether	--	100	N.D.
	Nonabromodiphenylether	--	100	N.D.
	Decabromodiphenylether	--	100	N.D.
	Sum of detected PBDEs	1000	--	N.D.

- Note:
1. mg/kg = milligram per kilogram.
 2. MDL=Method Detection Limit
 3. N.D. = Not Detected (< MDL).
 4. "--" = Not Applicable.

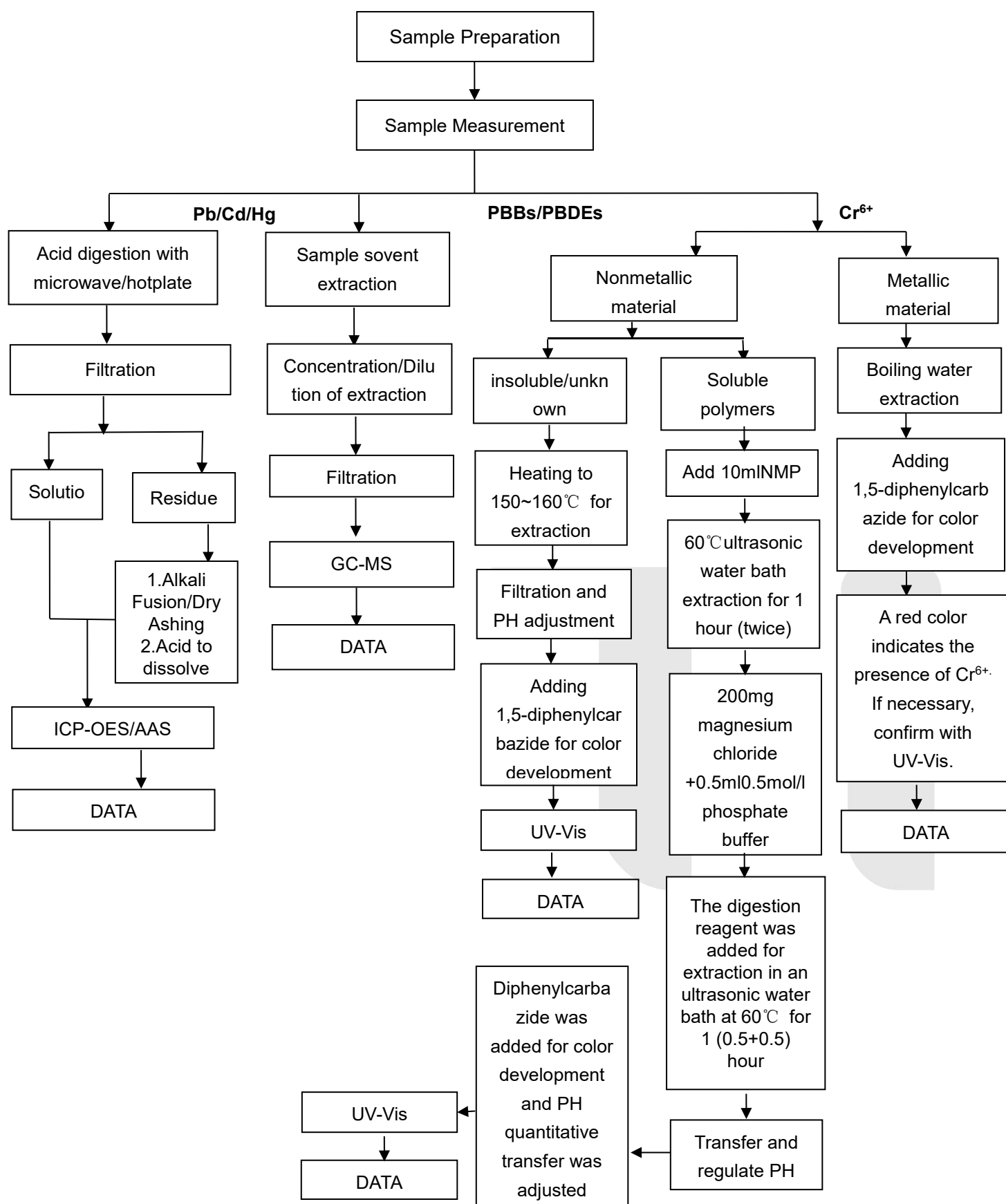
3.4 Phthalates Content

Test Method: IEC 62321-8:2017, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

Test Item	Di-(2-ethylhexyl) phthalate (DEHP)	Dibutyl phthalate (DBP)	Butyl benzyl phthalate (BBP)	Diisobutyl phthalate (DIBP)
CAS No.	117-81-7	84-74-2	85-68-7	84-69-5
Limit	1000 mg/kg	1000 mg/kg	1000 mg/kg	1000 mg/kg
Material No.	Result (mg/kg)			
A1+A2+A3	N.D.	N.D.	N.D.	N.D.
A4+A17+A22	N.D.	N.D.	N.D.	N.D.
A23+A27+A28	N.D.	N.D.	N.D.	N.D.
A31+A33+A35	N.D.	N.D.	N.D.	N.D.
A38+AB1	N.D.	N.D.	N.D.	N.D.
A10	N.D.	N.D.	N.D.	N.D.
A13+A14+A15	N.D.	N.D.	N.D.	N.D.
A19+A20+A21	N.D.	N.D.	N.D.	N.D.
A24+A34+A36	N.D.	112	N.D.	N.D.
A37	N.D.	N.D.	N.D.	N.D.

- Note:
1. mg/kg = milligram per kilogram
 2. Limit of Quantitation = 50mg/kg
 3. N.D. = Not Detected (< LOQ)

RoHS Testing Flow Chart



Phthalates Testing Flow Chart

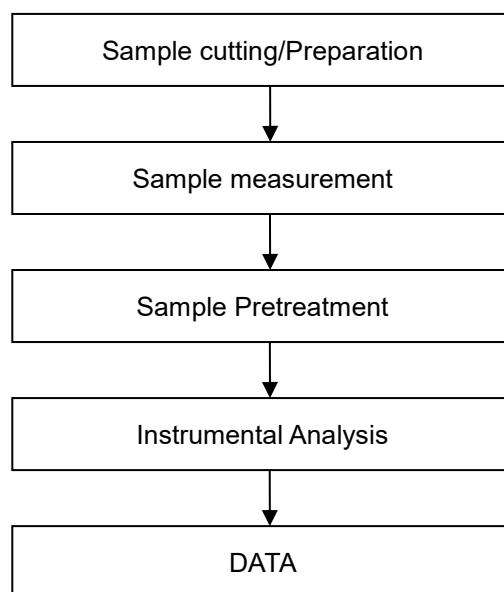
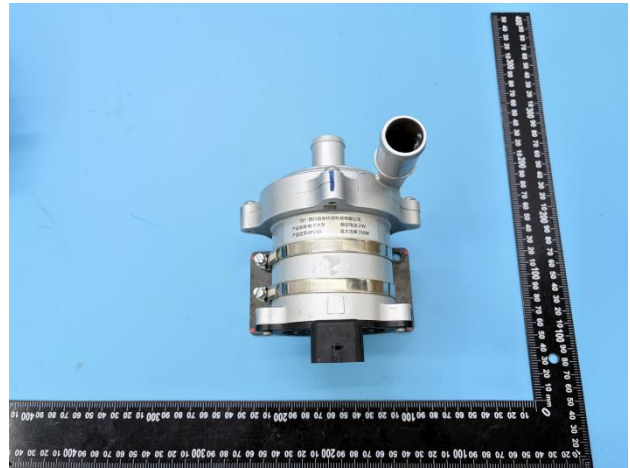


Photo of Sample



Remark: The test component < A39 > was provided by client for retest on dated Jun.01, 2026.

Statement

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3. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
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End of Report

