




TEST REPORT

Report No...... : WTX24X07156004C
Applicant..... : GlobTek, Inc.
Address..... : 186 Veterans Dr. Northvale, NJ 07647 USA
Manufacturer : GlobTek (Suzhou) Co., Ltd
Address : Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China
Sample Name..... : Power supply
Model No. : GTM96060-0606-1.0
Reference Model No. : NA
Brand..... : 
Test Requested..... : In accordance with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863, to determine the 10 restricted substances content in the submitted sample.
Test Conclusion..... : **Pass** (Based on the performed tests on the submitted samples, the results comply with the requirement of EU RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863).
Date of Receipt sample..... : 2024-07-04
Testing period..... : 2024-07-04 ~ 2024-07-15
Date of Issue..... : 2024-07-18
Test Result..... : Refer to next page (s)

Prepared By:

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Signed for and on behalf of
Waltek Testing Group (Shenzhen) Co., Ltd.

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Test Method:

- IEC 62321-3-1:2013, screening - Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry (XRF)
- IEC 62321-4:2013+AMD1:2017 CSV for mercury (Hg), analyzed by ICP-OES
- IEC 62321-5:2013 for lead (Pb) and cadmium (Cd), analyzed by ICP-OES
- IEC 62321-7-2:2017 and/or IEC 62321-7-1:2015 for hexavalent chromium (Cr⁶⁺), analyzed by UV-Vis
- IEC 62321-6:2015 for PBBs and PBDEs, analyzed by GC-MS
- IEC 62321-8:2017 for phthalates, analyzed by GC-MS

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Test Results:

1. Lead, Mercury, Cadmium, Hexavalent Chromium, PBBs and PBDEs

No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
1	Silvery metal PIN	BL	BL	BL	BL	NA	NA
2	Black plastic	BL	BL	BL	BL	BL	NA
3	Silvery metal buckle	BL	BL	BL	BL	NA	NA
4	Black plastic shell	BL	BL	BL	BL	BL	NA
5	Transparent plastic sheet	BL	BL	BL	BL	BL	NA
6	Black plastic shell	BL	BL	BL	BL	BL	NA
7	Black soft plastic cable jacket	BL	BL	BL	BL	BL	NA
8	Black plastic label w/white printing	BL	BL	BL	BL	BL	NA
9	Black plastic (Type-C)	BL	BL	BL	BL	BL	NA
10	Silvery metal shell (Type-C)	BL	BL	BL	IN	NA	Cr ⁶⁺ : Negative
11	Golden cladding metal PIN (Type-C)	BL	BL	BL	BL	NA	NA
12	Black soft plastic plug (Type-C)	BL	BL	BL	BL	BL	NA



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No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
13	Translucent plastic filling (Type-C)	BL	BL	BL	BL	BL	NA
14	Black resistance SMD	BL	BL	BL	BL	BL	NA
15	Solder (Type-C)	BL	BL	BL	BL	NA	NA
16	Black plastic wire jacket	BL	BL	BL	BL	BL	NA
17	White plastic wire jacket	BL	BL	BL	BL	BL	NA
18	Coppery metal wire core	BL	BL	BL	BL	NA	NA
19	Black soft plastic plug	BL	BL	BL	BL	BL	NA
20	Black soft plastic	BL	BL	BL	BL	BL	NA
21	Gray magnet	BL	BL	BL	BL	BL	NA
22	Green LED body	BL	BL	BL	BL	BL	NA
23	White glue	BL	BL	BL	BL	BL	NA
24	Black plastic film w/white printing (capacitor 1)	BL	BL	BL	BL	BL	NA



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No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
25	Black rubber cover (capacitor 1)	BL	BL	BL	BL	BL	NA
26	Silvery metal shell (capacitor 1)	BL	BL	BL	BL	NA	NA
27	Cream wet paper (capacitor 1)	BL	BL	BL	BL	BL	NA
28	Silvery metal PIN (capacitor 1)	BL	BL	BL	BL	NA	NA
29	Black plastic film w/white printing (capacitor 2)	BL	BL	BL	BL	BL	NA
30	Green resistance w/multicolor printing	BL	BL	BL	BL	BL	NA
31	Black body w/gray printing (Schott diode)	BL	BL	BL	BL	BL	NA
32	Silvery metal PIN (Schott diode)	BL	BL	BL	BL	NA	NA
33	Blue body (Y capacitor)	BL	BL	BL	BL	BL	NA
34	Silvery metal PIN (Y capacitor)	BL	BL	BL	BL	NA	NA
35	Brown plastic cap (fuse)	BL	BL	BL	BL	BL	NA
36	Black plastic base (fuse)	BL	BL	BL	BL	BL	NA



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No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
37	Silvery metal PIN (fuse)	BL	BL	BL	BL	NA	NA
38	Silvery metal filament (fuse)	BL	BL	BL	BL	NA	NA
39	Black body	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND
40	Silvery metal sheet	BL	BL	BL	BL	NA	NA
41	Yellow plastic adhesive tape (Transformer)	BL	BL	BL	BL	BL	NA
42	Black cladding solid material axle (Transformer)	BL	BL	BL	BL	BL	NA
43	Coppery metal coil (Transformer)	BL	BL	BL	BL	NA	NA
44	Black body w/gray printing (Schott diode)	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND
45	Silvery metal PIN (Schott diode)	BL	BL	BL	BL	NA	NA
46	Black soft plastic tube	BL	BL	BL	BL	BL	NA
47	Gray solid material (Inductance)	BL	BL	BL	BL	BL	NA
48	Coppery metal coil (Inductance)	BL	BL	BL	BL	NA	NA



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No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
49	Black rubber cover (capacitor)	BL	BL	BL	BL	BL	NA
50	Silvery metal shell w/red printing (capacitor)	BL	BL	BL	BL	NA	NA
51	Cream wet paper (capacitor)	BL	BL	BL	BL	BL	NA
52	Black plastic film w/white printing (capacitor 3)	BL	BL	BL	BL	BL	NA
53	Black rubber cover (capacitor 3)	BL	BL	BL	BL	BL	NA
54	Silvery metal shell (capacitor 3)	BL	BL	BL	BL	NA	NA
55	Cream wet paper (capacitor 3)	BL	BL	BL	BL	BL	NA
56	Silvery metal PIN (capacitor 3)	BL	BL	BL	BL	NA	NA
57	Green cladding PCB board	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND
58	Solder	BL	BL	BL	BL	NA	NA
59	Black resistance SMD	BL	BL	BL	BL	BL	NA
60	Brown capacitor SMD	BL	BL	BL	BL	BL	NA

**Note:**

- (1) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for Cr⁶⁺) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1: 2013 (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	LOD < IN < (150+3σ) ≤ OL
Pb	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < IN < (1500+3σ) ≤ OL
Hg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < IN < (1500+3σ) ≤ OL
Cr	BL ≤ (700-3σ) < IN	BL ≤ (700-3σ) < IN	BL ≤ (500-3σ) < IN
Br	BL ≤ (300-3σ) < IN	--	BL ≤ (250-3σ) < IN

BL= Below Limit OL= Over Limit LOD = Limit of Detection -- = Not Regulated

- (2) "IN" expresses the inconclusive region, and further chemical testing to confirm whether it complies with the requirement of RoHS Directive.
- (3) The XRF screening test for RoHS elements – the reading may be different to the actual content in the sample be of non-uniformity composition.
- (4) mg / kg =milligram per kilogram=ppm, μg/cm²= Micrograms per square centimeter.
- (5) ND = Not Detected, less than the value of Method Detection Limit.
- (6) NA = Not Applicable, as the XRF screening test result was below the limit, it was not need to conduct the chemical testing.
- (7) MDL= Method Detection Limit in chemical test.

Test Items	Pb	Cd	Hg	Cr ⁶⁺	PBB	PBDE
Units	mg/kg	mg/kg	mg/kg	mg/kg	μg/cm ²	mg/kg
MDL	10	10	10	10	0.1	10

The MDL for single compound of PBBs and PBDEs is 10mg/kg, MDL of Cr⁶⁺ for polymer and composite sample is 10mg/kg and MDL of Cr⁶⁺ for metal sample is 0.1μg/cm².

- (8) Requirement as per RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr ⁶⁺)	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

- (9) According to IEC 62321-7-1:2015, determined of Cr⁶⁺ on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr⁶⁺ coating, the detected concentration in boiling water extraction solution is less than 0.10μg/cm².



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Positive = Presence of Cr⁶⁺ coating, the detected concentration in boiling water extraction solution is greater than 0.13μg/cm².

Information on storage conditions and production date of the tested sample is unavailable and thus Cr⁶⁺ results represent status of the sample at the time of testing.

(10) Abbreviation:

“Pb” denotes Lead, “Cd” denotes Cadmium, “Hg” denotes Mercury, “Cr” denotes Chromium, “Cr⁶⁺” denotes Hexavalent Chromium, “Br” denotes Bromine, “PBBs” denotes Total Polybrominated Biphenyls, “PBDEs” denotes Total Polybrominated Diphenyl Ethers.

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2. Phthalates (DEHP, BBP, DBP, DIBP)

Serial No.	Part No. (See Photograph of parts tested)	Result (mg/kg)			
		DIBP	DBP	BBP	DEHP
T01	2+4 [△]	ND	ND	ND	ND
T02	5+6 [△]	ND	ND	ND	ND
T03	7+20 [△]	ND	ND	ND	ND
T04	8	ND	ND	ND	ND
T05	9+13+14 [△]	ND	ND	ND	ND
T06	12+19 [△]	ND	ND	ND	ND
T07	16+17 [△]	ND	ND	ND	ND
T08	21+22+25 [△]	ND	ND	ND	ND
T09	23+46 [△]	ND	ND	ND	ND
T10	24+29 [△]	ND	ND	ND	ND
T11	27+30+31 [△]	ND	ND	ND	ND
T12	33+35+36 [△]	ND	ND	ND	ND
T13	39+42+44 [△]	ND	ND	ND	ND
T14	41+52 [△]	ND	ND	ND	ND
T15	47+49+51 [△]	ND	ND	ND	ND
T16	53+55+57 [△]	ND	ND	ND	ND
T17	59+60 [△]	ND	ND	ND	ND

Note:

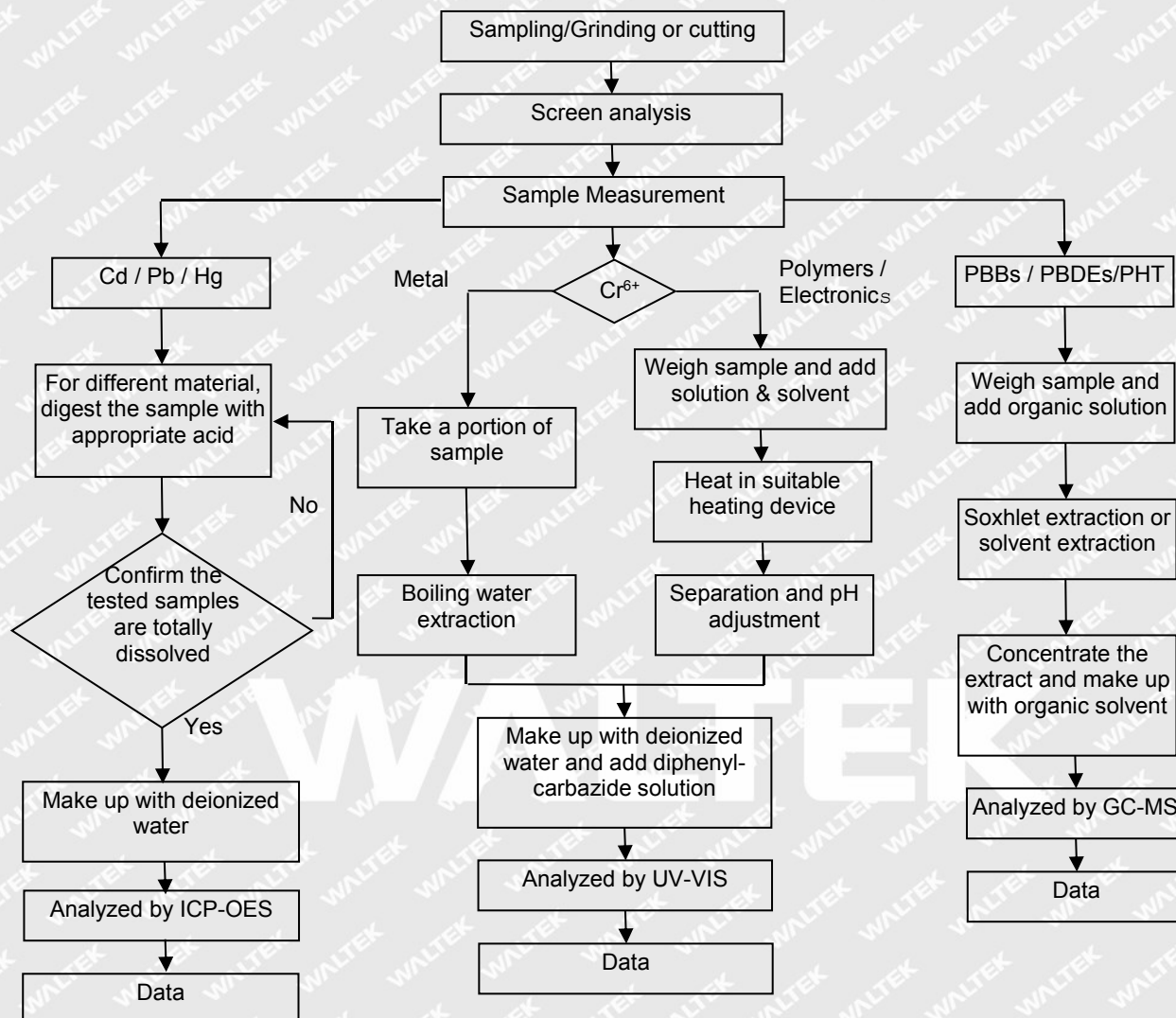
- (1) mg/kg = milligram per kilogram = ppm.
- (2) Requirement as per RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863

Test Item(s)	Limit (mg/kg)
Bis (2-ethylhexyl)- phthalate (DEHP)	1000
Dibutyl phthalate (DBP)	1000
Benzylbutyl phthalate (BBP)	1000
Diisobutyl phthalate (DIBP)	1000

- (3) Abbreviation:
 “DBP” denotes Dibutyl phthalate, “BBP” denotes Benzyl butyl phthalate (BBP), “DEHP” denotes Bis(2-ethylhexyl)-phthalate, “DIBP” denotes Diisobutyl phthalate, “PHT” denotes Phthalates.
- (4) Method Detection Limit (MDL) : 50mg/kg for each of phthalate.
- (5) “△” = As client’s requirement, the testing was conducted based on mixed components. Results are calculated by the minimum weight of mixed components.



Measurement Flow chart:





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Sample Photo:





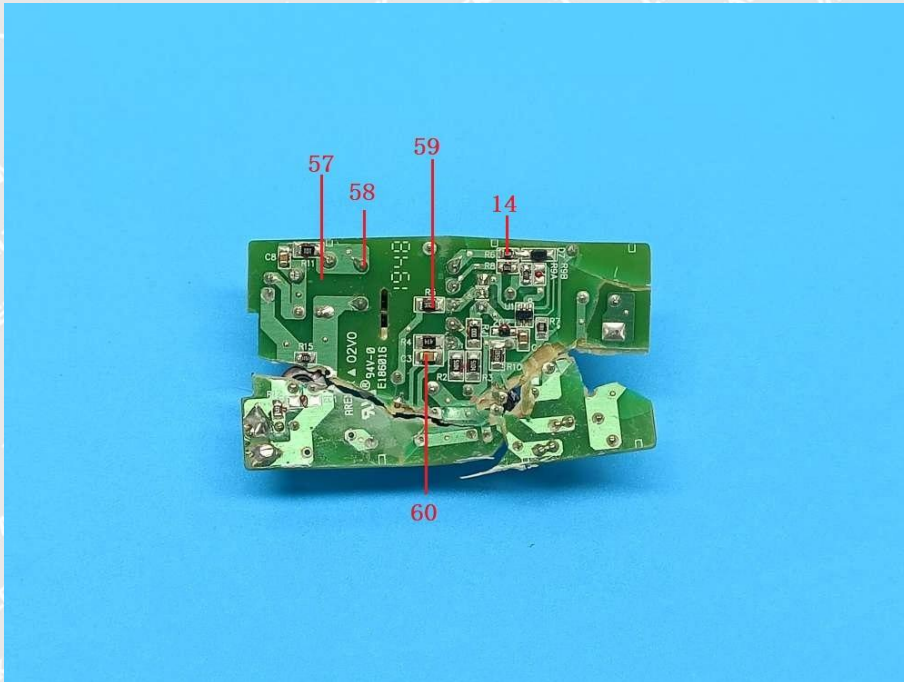
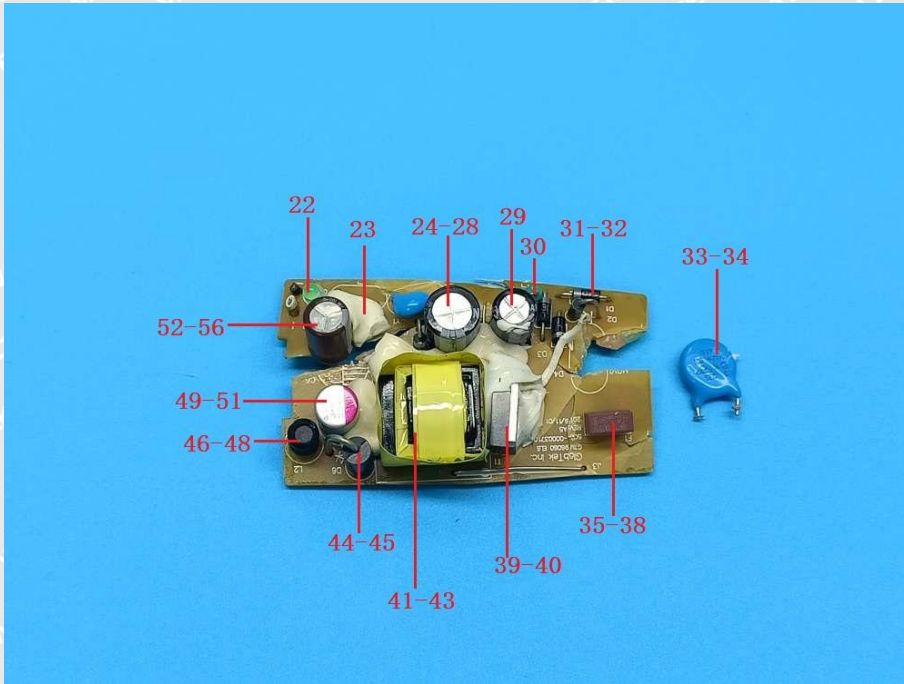
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Photograph of parts tested :





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Remarks:

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End of Report
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