TEST REPORT

Report No.	:	WTX22X07147389C
Applicant	:	SHENZHEN MONOKO TECHNOLOGY CO.,LTD.
Address	:	Room 507, Building 10, Yungu Phase 2, No.2, Pingshan First Road, Taoyuan street, Nanshan District, Shenzhen, China
Manufacturer	:	SHENZHEN MONOKO TECHNOLOGY CO.,LTD.
Address	:	Room 507, Building 10, Yungu Phase 2, No.2, Pingshan First Road, Taoyuan street, Nanshan District, Shenzhen, China
Sample Name	:	aluminium alloy nylon braided cable
Sample Model	:	UC411
Sample Material	:	NA
Supplier	:	NA
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	:	2022-07-20
Testing period	:	2022-07-20~2022-07-27
Date of Issue	:	2022-07-28
Test Result	:	Refer to next page (s)

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China
Tel:+86-755-33663308 Fax:+86-755-33663309 E-mail:sem@waltek.com.cn

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

Hugo Chen

Hugo.CHen

Reference Model No.	:	US220-01,US220-02,US220-03,US220-04,US320-02,UC422-24, UC420,UC419,UC418,UC417,UC416,UC415,UC415-21R,UC415-22R, UC415-23R,UC415-24R,UC413,UC412,UC410,UC409,UC408,UC407, UC406,UC405,UC403,UC402,UC401,UC201,UC103,UC102,UC101, UC101-44,UA401-31,UA402-32,UA402-22,UC302,UC301,US401, UC501-2C,UC502,UC421-28,UC101-28,UC409-2A,UC409-2B,UC409-2C, UC409-2D,UC409-2E,UC409,US130-04
Brand.....	:	NA

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 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 (Cr^{6+}), 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

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	Black fiber cable jacket	BL	BL	BL	BL	BL	NA
2	Black soft plastic cable jacket	BL	BL	BL	BL	BL	NA
3	Red plastic wire jacket 1	BL	BL	BL	BL	BL	NA
4	Black plastic wire jacket 1	BL	BL	BL	BL	BL	NA
5	Write plastic wire jacket 1	BL	BL	BL	BL	BL	NA
6	Green plastic wire jacket 1	BL	BL	BL	BL	BL	NA
7	Silvery metal wire core	BL	BL	BL	BL	NA	NA
8	Black plastic（USB Type-C）	BL	BL	BL	BL	BL	NA
9	Silvery metal（USB Type-C）	BL	BL	BL	IN	NA	Cr^{6+}:Negative
10	Golden cladding metal PIN（USB Type-C）	BL	BL	BL	BL	NA	NA
11	Black cladding metal shell	BL	BL	BL	BL	NA	NA
12	Black soft plastic plug	BL	BL	BL	BL	BL	NA

No.	Part Description (See Photograph of parts tested)	Result of XRF					Result of Chemical Testing (mg/kg)
		Pb	Cd	Hg	Cr	Br	
13	Green cladding PCB board	BL	BL	BL	BL	IN	PBBs:ND PBDEs:ND
14	Solder	BL	BL	BL	BL	NA	NA
15	Blue plastic wire jacket	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 Cr^{6+}) 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	$\mu g/cm^2$	mg/kg	mg/kg
MDL	10	10	10	10	0.1	10	10

The MDL for single compound of PBBs and PBDEs is 10mg/kg, MDL of Cr^{6+} for polymer and composite sample is 10mg/kg and MDL of Cr^{6+} for metal sample is 0.1μg/cm^2.

(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 Cr^{6+} on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr^{6+} coating, the detected concentration in boiling water extraction solution is less than 0.10μg/cm^2.

Positive = Presence of Cr^{6+} coating, the detected concentration in boiling water extraction solution is greater than 0.13μg/cm^2.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr^{6+} 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, "Cr^{6+}" denotes Hexavalent Chromium, "Br" denotes Bromine, "PBBs" denotes Total Polybrominated Biphenyls, "PBDEs" denotes Total Polybrominated Diphenyl Ethers.

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

Serial No.	Part No. (See Photograph of parts tested)	Result (mg/kg)			
		DIBP	DBP	BBP	DEHP
T01	1	ND	ND	ND	ND
T02	2+12△	ND	ND	ND	ND
T03	3+4△	ND	ND	ND	ND
T04	5+6+15△	ND	ND	ND	ND
T05	8+13△	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

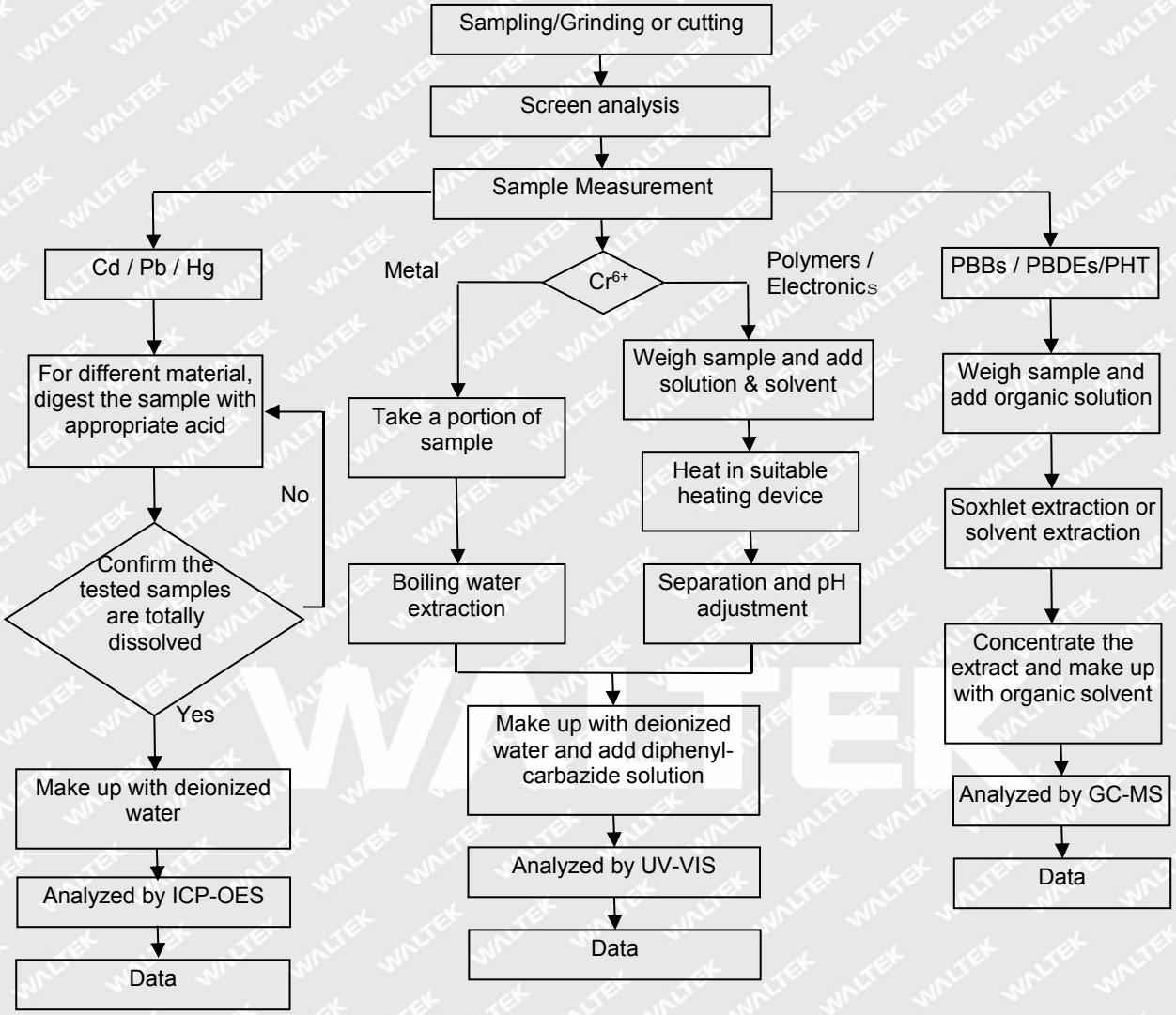
Test Item(s)	Limit（mg/kg）
Bis (2-ethylhexyl)- phthalate (DEHP)	1000
Dibutyl phthalate (DBP)	1000
Benzylbutyl phthalate (BBP)	1000
Diisobutyl phthalate (DIBP)	1000

(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:



Sample Photo:

Photograph of parts tested ：

Remarks:

1. The results shown in this test report refer only to the sample(s) tested;
2. This test report cannot be reproduced, except in full, without prior written permission of the company;
3. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver;
4. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which Waltek hasn't verified;
5. If the report is not stamped with the accreditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.

====== End of Report ======