

TEST REPORT

Applicant : ZHEJIANG RECI LASER TECHNOLOGY CO., LTD.
Address : Scientific Research Plant No. 2, Jintang North Road No. 2, Eastern New District, Wenling City, Taizhou City, Zhejiang Province, China

Report on the submitted sample said to be:

Sample name : Air-cooled fiber laser
Trade Name : RECI
Model : FCA1500, FCA1000, FCA2000
Manufacture : ZHEJIANG RECI LASER TECHNOLOGY CO., LTD.
Address : Scientific Research Plant No. 2, Jintang North Road No. 2, Eastern New District, Wenling City, Taizhou City, Zhejiang Province, China
Sample received date : Dec. 23, 2021
Testing period : Dec. 23, 2021- Dec. 28, 2021

Test sample	Test Requested:	Conclusion
001	RoHS Directive 2011/65/EU and its subsequent amendments & Directive (EU)2015/863 — Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs Content —Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate(DIBP) Content	Pass

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

Shenzhen ZTS Testing Service Co., Ltd.

Tested By:

Qian He
(Qian He)

Approved By:

Bert Yang
Lab Manager: Bert yang

Date

Dec. 28, 2021



Test Part Description:.

Specimen No.	Description.
001	Copper
002	aluminum
003	stainless steel

TEST RESULT:
1. Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs—RoHS Directive (EU) 2015/863

Test Items	Unit	Test Method	Result			MDL	Limit
			001	002	003		
Lead (Pb)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	2	1000
Mercury (Hg)	mg/kg	IEC 62321-4:2013+A1:2017*, ICP-OES	N.D.	N.D.	N.D.	2	1000
Cadmium(Cd)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	2	100
Hexavalent Chromium (CrVI)	µg/cm ²	IEC 62321-7-1:2015, UV-VIS	N.D.	N.D.	N.D.	0.10	0.10
Monobromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Dibromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Tribromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Tetrabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Pentabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Hexabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Heptabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Octabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Nonabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Decabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Sum of PBBs	mg/kg	-	N.D.	N.D.	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Dibromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Tribromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Tetrabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Pentabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Hexabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Heptabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Octabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Nonabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Decabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	-
Sum of PBDEs	mg/kg	-	N.D.	N.D.	N.D.	-	1000

Note:

1. mg/kg = milligram per kilogram = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. “-” = Not Regulated
5. Boiling-water-extraction:
 Negative = Absence of Cr(VI) coating / surface layer: the detected concentration in boiling-water-extraction solution is less than 0.10µg with 1cm² sample surface area. Positive = Presence of Cr(VI) coating / surface layer: the detected concentration in boiling-water-extraction solution is greater than 0.13µg with 1cm² sample surface area.
 Inconclusive = the detected concentration in boiling-water-extraction solution is greater than 0.10µg and less than 0.13µg with 1cm² sample surface area.
6. Positive = result be regarded as not comply with RoHS requirement
7. Negative = result be regarded as comply with RoHS requiremen

2. Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) Content—RoHS Directive (EU) 2015/863

Test method: With reference to IEC 62321-8:2017*, analysis was performed by GC-MS.

Test Items	Unit	Result			MDL	Limit
		001	002	003		
Di-(2-ethylhexyl) phthalate (DEHP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Benzylbutyl phthalate (BBP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Dibutyl phthalate (DBP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Diisobutyl phthalate(DIBP)	mg/kg	N.D.	N.D.	N.D.	50	1000

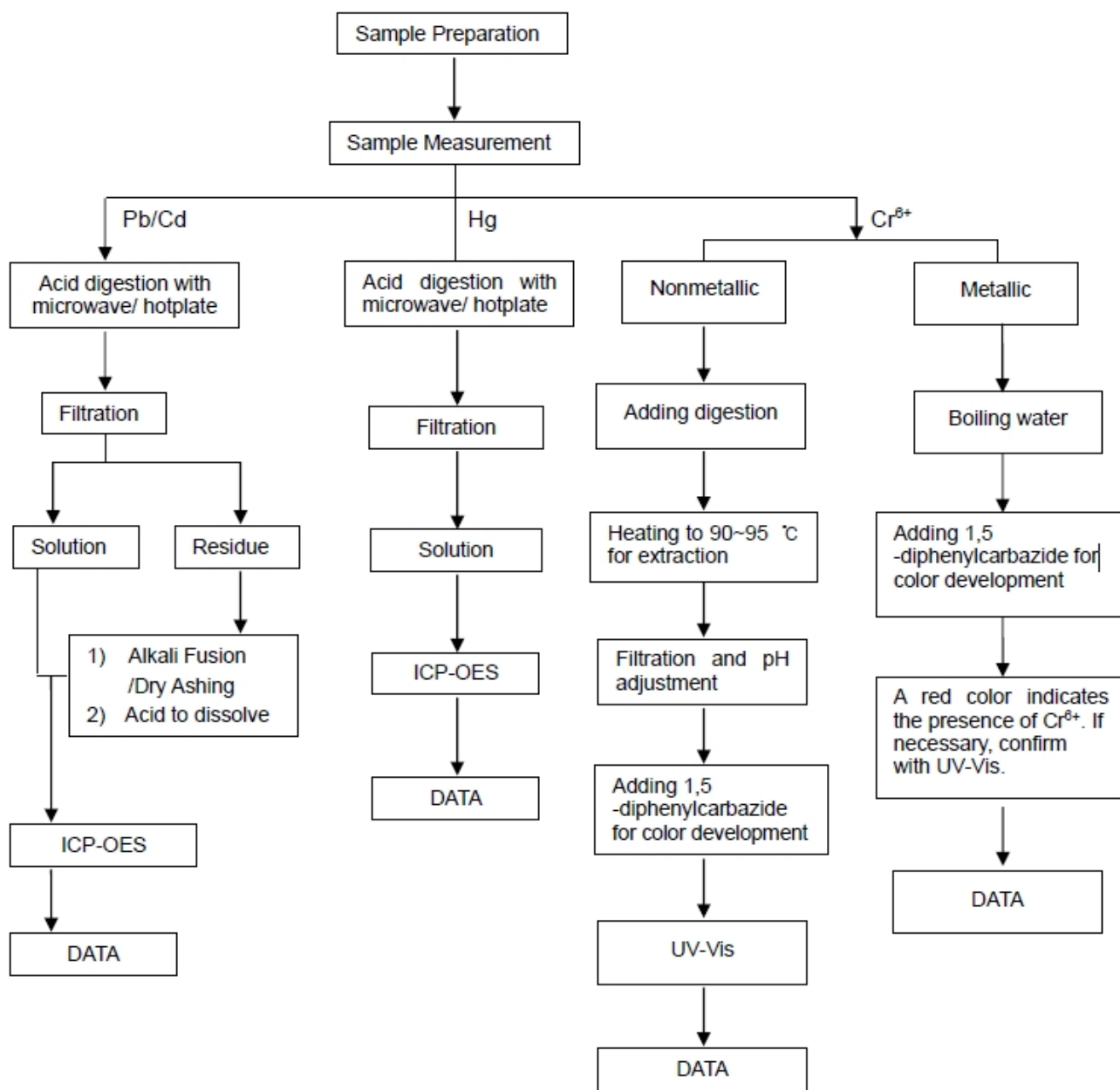
Note:

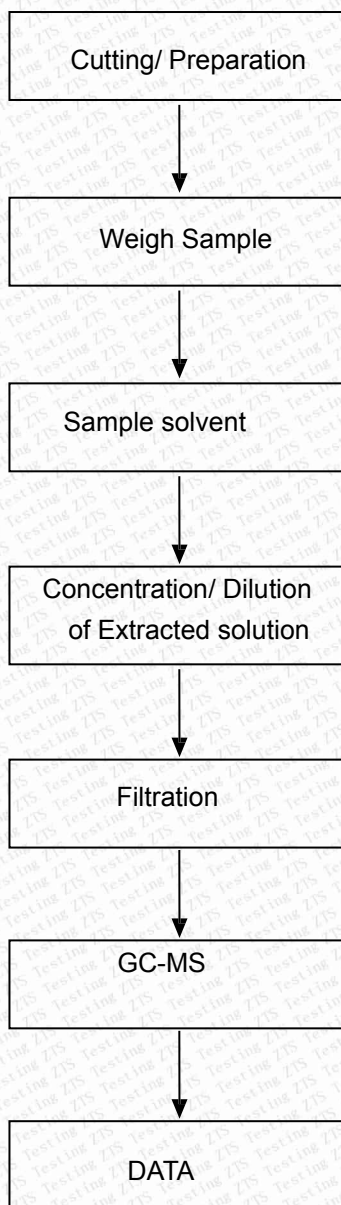
1. mg/kg = milligram per kilogram = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method detection limit
4. “*”=The test method of Phthalates is not authorized by CNAS

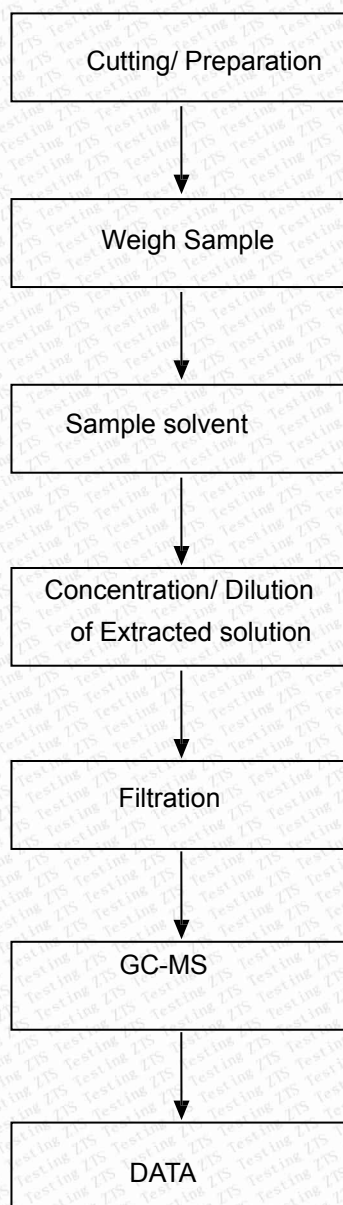
FLOW CHART FOR ROHS TESTING:

Pb/Cd/Hg/Cr6+ Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr^{6+} test method excluded)



PBBs/PBDEs Testing Flow Chart

Phthalates Testing Flow Chart

PHOTOGRAPH OF SAMPLE



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

****END OF REPORT****