

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	Pass
	—Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP),	
	Dibutyl phthalate (DBP), Diisobutyl phthalate(DIBP) Content	

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

Great Production

Shenzhen ZTS Testing Service Co., Ltd.

Tested By:

Approved By:

Lab Manager: Bert yang

(Oian He)

Date : Dec. 28, 2021

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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
UN TE LESCING TE LESCING TE LESCH		US TIZ LESTING TIZ LESTING TIZ LESTING	001 002		003	15 Test	18 175 Te
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/cm²	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	26 4- 148 11
Dibromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	Learling Learling
Tribromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	12 Test
Tetrabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	1 - 1 - 10 - 10 - 10 - 10 - 10 - 10 - 1
Pentabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	148 14
Hexabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	LS 21 ! UR
Heptabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	12 4 C. 118
Octabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	1/2 1/62
Nonabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	108-175 Te
Decabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	17 May 175
Sum of PBBs	mg/kg	Lesting The Lesting The Lesting The Les	N.D.	N.D.	N.D.	Club III	1000
Monobromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	15 Test 1
Dibromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	125 705
Tribromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	110 110 1
Tetrabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	120 - 140 1 27 - 140 12
Pentabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	2 (6.2.1.14)
Hexabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	10 1820)
Heptabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	175 TE
Octabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	110 115
Nonabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	162 148 1
Decabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	5	10 ⁹ (10 ⁸)
Sum of PBDEs	mg/kg	12 Leg 108 12 Leg 108 12 Leg 108 12	N.D.	N.D.	N.D.	2 Jest ink	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 $0.10\mu g$ with $1cm^2$ sample surface area. Positive = Presence of Cr(VI) coating / surface layer: the detected concentration in boiling-water-extraction solution is greater than $0.13\mu g$ with $1cm^2$ 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. <u>Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) Content—RoHS Directive (EU) 2015/863</u>

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

Test Items	Unit	47108 175 7851	Result		MDL	Limit
28 12 Leg 114 12 Leg 114 12 Leg 114 12 Leg 126 Leg 146 146 156 166 146 166 166 166 166 166 166 166 16	esching The Lesting The Los	001	002	003		148 12 Jest In
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:

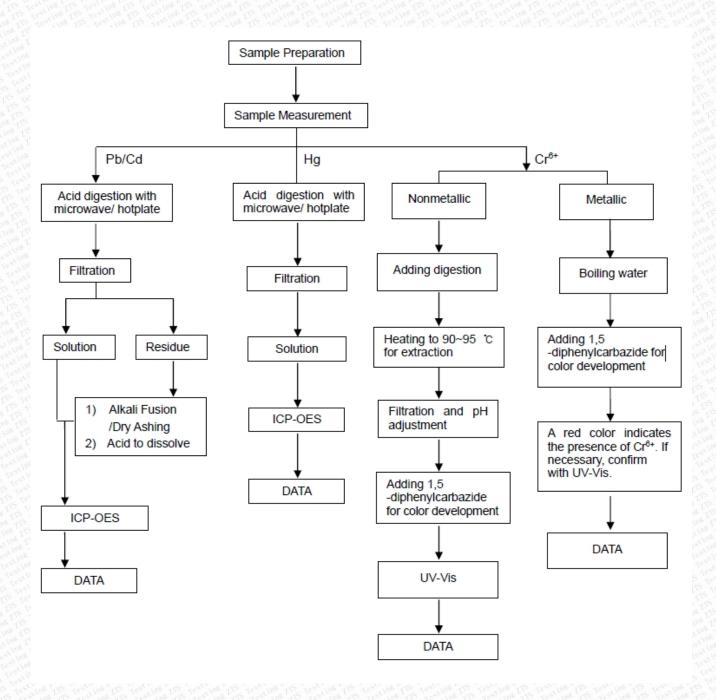
- mg/kg = milligram per kilogram = ppm
- 2. N.D. = Not Detected (<MDL)
- 3. MDL = Method detection limit
- 4. "*"=The test method of Phthalates is not authorized by CNAS



FLOW CHART FOR ROHS TESTING:

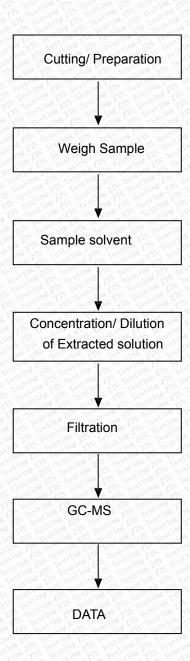
Pb/Cd/Hg/Cr6+ Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ test method excluded)



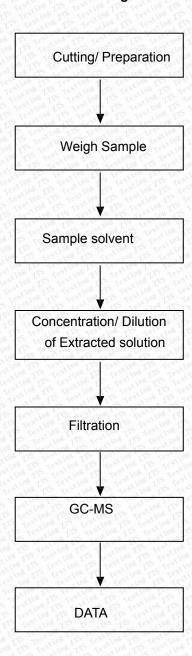


PBBs/PBDEs Testing Flow Chart





Phthalates Testing Flow Chart





PHOTOGRAPH OF SAMPLE



Photo 1



Photo 2





Photo 3



Photo 4





Photo 5



Photo 6





Photo 7

****END OF REPORT****