



Test Report

Report No. A2190023094101005R1

Applicant SHENZHEN RUNLITE TECHNOLOGY CO.,LTD

Address BUILDING A15, TANTOU THE 4TH INDUSTRIAL ESTATE, SONGGANG TOWN, BAOAN DISTRICT, SHENZHEN, CHINA

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

Sample Name Hard Filament LED
Part No. 51mm
Client Reference Information 26mm、28mm、38mm、40mm、50mm、57mm、58mm、61mm、64mm、67mm、68mm
Sample Received Date Feb. 13, 2019
Testing Period Feb. 13, 2019 to Feb. 19, 2019

Test Requested As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP) in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).



Tested by

Grit Qin

Approved by

Hill Zheng

Hill Zheng

Technical Manager

Centre Testing International Group Co.,Ltd.

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Reviewed by

Cathy Huang

Date

Feb. 25, 2019

No. R158921854

Test Report

Report No. A2190023094101005R1

Page 2 of 7

Test Method

| Test Item(s) | Test Method | Measured Equipment(s) |
|------------------------------------------|-------------------------------------------------------------------------------|-----------------------|
| Lead(Pb) | IEC 62321-5:2013 | ICP-OES |
| Cadmium(Cd) | IEC 62321-5:2013 | ICP-OES |
| Mercury(Hg) | IEC 62321-4:2013+AMD1:2017 CSV | ICP-OES |
| Hexavalent Chromium(Cr(VI)) # | IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013 | UV-Vis/ICP-OES |
| Polybrominated Biphenyls(PBBs) # | IEC 62321-6:2015 | GC-MS |
| Polybrominated Diphenyl Ethers (PBDEs) # | IEC 62321-6:2015 | GC-MS |
| Phthalates (DBP, BBP, DEHP, DIBP) # | IEC 62321-8:2017 | GC-MS |

Test Report

Report No. A2190023094101005R1

Page 3 of 7

Test Result(s)

| Tested Item(s) | Result | MDL |
|-------------------------------------------------|--------|---------|
| Lead(Pb) | N.D. | 2 mg/kg |
| Cadmium(Cd) | N.D. | 2 mg/kg |
| Mercury(Hg) | N.D. | 2 mg/kg |
| Hexavalent Chromium(Cr(VI)) # | N.D. | 8 mg/kg |
| Tested Item(s) | Result | MDL |
| Polybrominated Biphenyls(PBBs) # | | |
| Monobromobiphenyl | N.D. | 5 mg/kg |
| Dibromobiphenyl | N.D. | 5 mg/kg |
| Tribromobiphenyl | N.D. | 5 mg/kg |
| Tetrabromobiphenyl | N.D. | 5 mg/kg |
| Pentabromobiphenyl | N.D. | 5 mg/kg |
| Hexabromobiphenyl | N.D. | 5 mg/kg |
| Heptabromobiphenyl | N.D. | 5 mg/kg |
| Octabromobiphenyl | N.D. | 5 mg/kg |
| Nonabromobiphenyl | N.D. | 5 mg/kg |
| Decabromobiphenyl | N.D. | 5 mg/kg |
| Tested Item(s) | Result | MDL |
| Polybrominated Diphenyl Ethers (PBDEs) # | | |
| Monobromodiphenyl ether | N.D. | 5 mg/kg |
| Dibromodiphenyl ether | N.D. | 5 mg/kg |
| Tribromodiphenyl ether | N.D. | 5 mg/kg |
| Tetrabromodiphenyl ether | N.D. | 5 mg/kg |
| Pentabromodiphenyl ether | N.D. | 5 mg/kg |
| Hexabromodiphenyl ether | N.D. | 5 mg/kg |
| Heptabromodiphenyl ether | N.D. | 5 mg/kg |
| Octabromodiphenyl ether | N.D. | 5 mg/kg |
| Nonabromodiphenyl ether | N.D. | 5 mg/kg |
| Decabromodiphenyl ether | N.D. | 5 mg/kg |

Test Report

Report No. A2190023094101005R1

Page 4 of 7

Test Result(s)

| Tested Item(s) | Result | MDL |
|----------------------------------------------------|--------|----------|
| Phthalates (DBP, BBP, DEHP, DIBP) # | | |
| Dibutyl phthalate(DBP) CAS#:84-74-2 | N.D. | 50 mg/kg |
| Butyl benzyl phthalate(BBP) CAS#:85-68-7 | N.D. | 50 mg/kg |
| Di-(2-ethylhexyl) phthalate(DEHP) CAS#:117-81-7 | N.D. | 50 mg/kg |
| Diisobutyl phthalate(DIBP) CAS#:84-69-5 | N.D. | 50 mg/kg |

Tested Sample/Part Description Filament LED (Mix all)

Remark: -The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.
 -As specified by client, the test was conducted by mixing all materials together. The result(s) shown on this report may be different from the content of any homogeneous material.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

Note: -# indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.

- This testing report revised "Client Reference Information" based on the original report of No. A2190023094101005. This testing report displaces the original one which was invalid since the date of this testing report released.

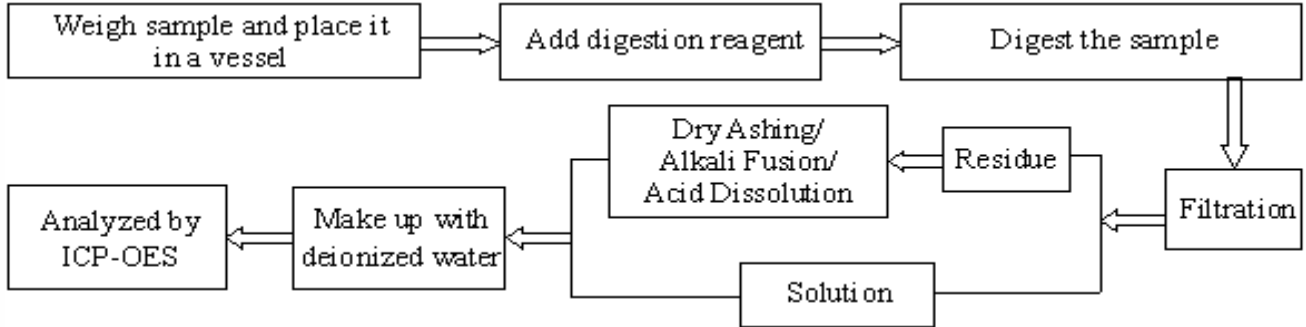
Test Report

Report No. A2190023094101005R1

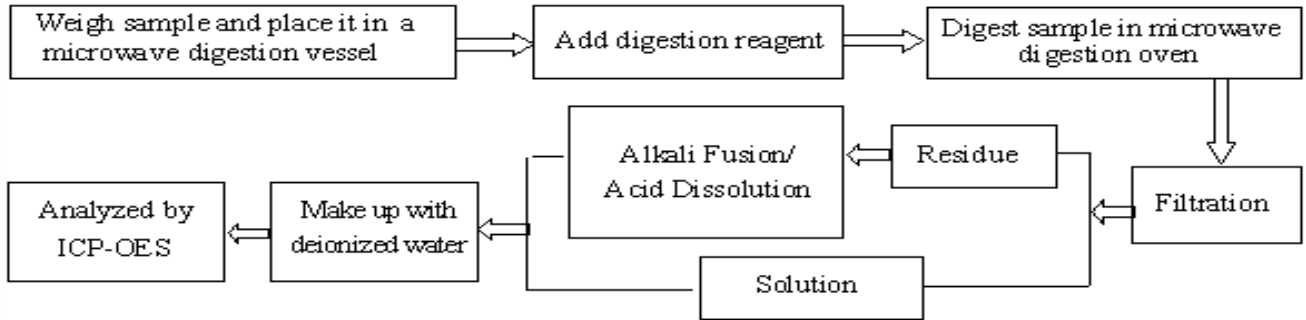
Page 5 of 7

Test Process

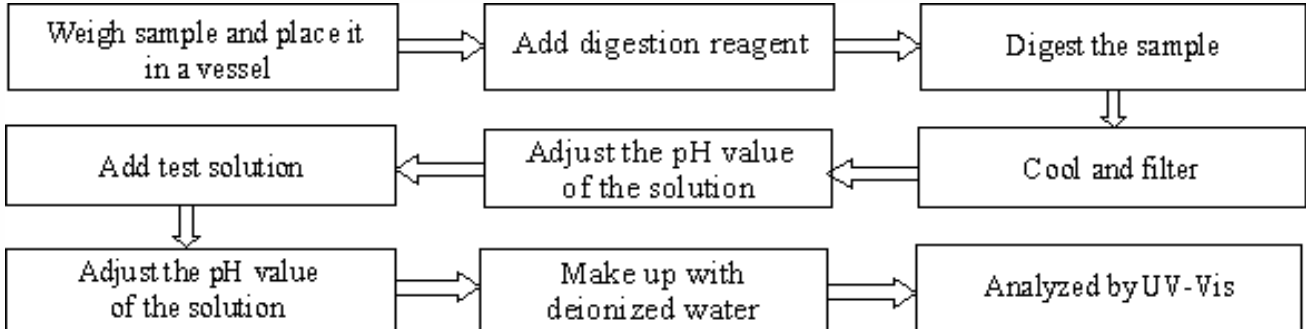
1. Lead(Pb), Cadmium(Cd), Chromium(Cr)



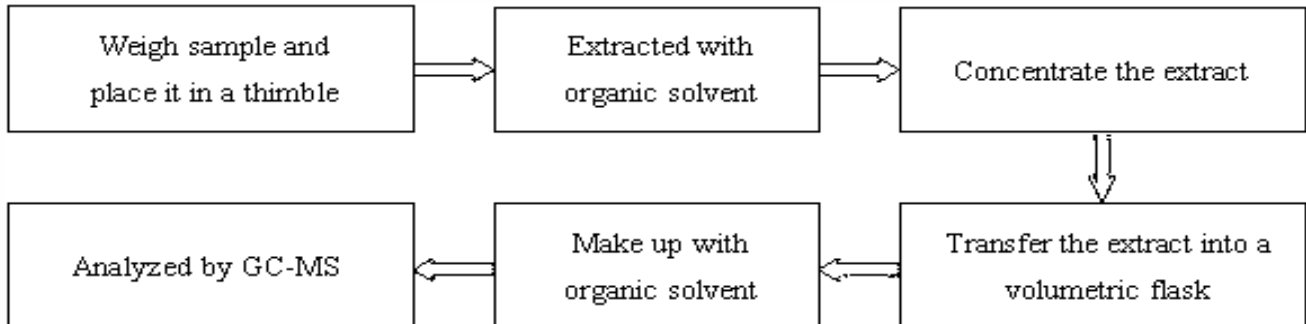
2. Mercury(Hg)



3. Hexavalent Chromium(Cr(VI))



4. Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs)

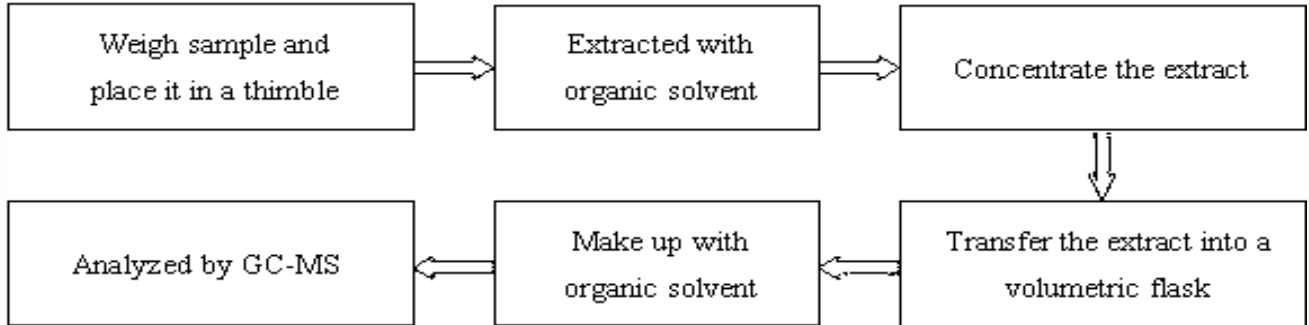


Test Report

Report No. A2190023094101005R1

Page 6 of 7

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



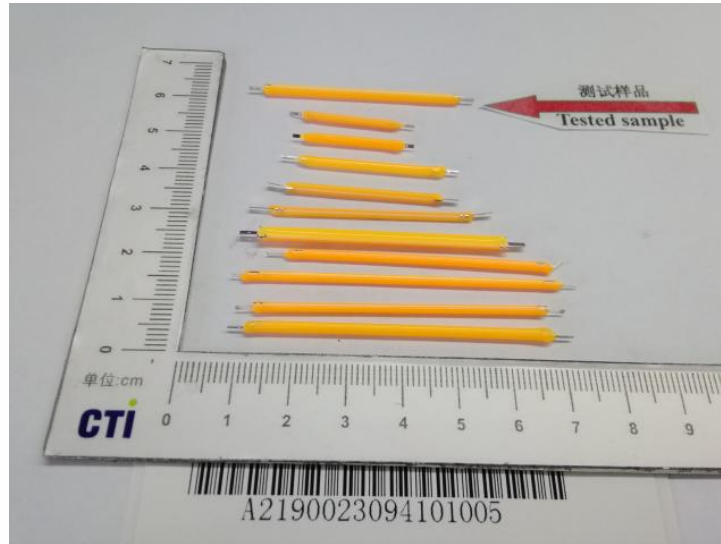
GROUP CO. LTD.

Test Report

Report No. A2190023094101005R1

Page 7 of 7

Photo(s) of the sample(s)



*** End of report ***

Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.