

CAS Testing Technical Services (GuangZhou) Co.,Ltd.

Report No. :HG210122-05E

Date:2021/01/22

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Applicant:

Luoyang Silicon Electronics Co.,LTD

Address :

No.279, Daobei Road, Xigong District, Luoyang City

The following merchandise was (were) submitted and identified by the client as:

Name of Sample:

Silicon

Test Type:

Commission

Analysis No.:

A210114-01

Sample Quantity:

Y

Batch No. /Brand/Model:

1

Sample Received:

2021/01/14

Test Period :

2021/01/14-2021/01/22

Test Method:

Please refer to next page(s).

Test Result:

Please refer to next page(s).

Conclusion:

Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated

diphenyl ethers (PBDEs), and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP). Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive 2011/65/EU and its

amendment Directive (EU) 2015/863.

Edited by:

Checked by:

16

Approved by:

Official Seal:

Add; No. 368 Xingke Road, Tianhe District, Guangzhou, P. R. China. E-mail: atc@gic.ac.cn

Tel: 400-119-8299, 020-85231290

Website: http://www.cas-test.org





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### TEST RESULT:

#### Sample Description:

Material No.	Description
001 Milles	Silver grey flakes

#### Remark:

- (1) I mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (<MDL)
- (4) "-" = Not Regulated

### RoHS Directive 2011/65/EU and its amendment Directive (EU) 2015/863

#### Test Method:

- Cadmium (Cd) and Lead (Pb): IEC 62321-5: 2013, analysis by ICP-OES.
- Mercury (Hg): IEC 62321-4: 2013/AMD1: 2017, analysis by ICP-OES.
- 3) Chromium (Cr(VI)): IEC 62321-7-2: 2017, analysis by UV/VIS.
- 4) PBBs and PBDEs: IEC 62321-6: 2015 analysis by GC-MS.
- 5) DEHP, BBP, DBP and DIBP : IEC 62321-8: 2017 analysis by GC-MS.

#### Limit Requirement:

According to Directive 2011/65/EU with its amendment Directive (EU) 2015/863), The maximum concentration values tolerated of Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) are not greater than 0.1% (w/w), and Cadmium (Cd) is not greater than 0.01% (w/w) by weight in homogeneous materials of Electrical and electronic products.

\*\*\*\*\*\* TO BE CONTINUE \*\*\*\*\*



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120.	73		1	Test Result	Conclusi
O) Test Item	Unit	Limit	MDL	001	001
Pb	mg/kg	1000	10	ND	PASS
Cd JIMB	mg/kg	100	1000	ND \	PASS
Hg 103	mg/kg	1000	10	ND NO	PASS
Cr(VI)	mg/kg	1000	10	ND	PASS
Sum of PBBs	mg/kg	1000	-	CND	PASS
Monobromobiphenyl	mg/kg	60,-	20	ND	1911
Dibromobiphenyl	mg/kg	-	20	ND \	20,
Tribromobiphenyl	mg/kg	-	20	ND	-
Tetrabromobiphenyl	mg/kg	200	20	ND	-
Pentabromobiphenyl	mg/kg	403/11/2	20	ND	- 05
Hexabromobiphenyl	mg/kg	7/2	20	ND	1990
Heptabromobiphenyl	mg/kg	-	20	ND	: 20pg
Octabromobiphenyl	mg/kg	-	20	ND	0) -
Nonabromobiphenyl	mg/kg	- 0	20	ND O	-
Decabromobiphenyl	mg/kg	chip	20	ND	-
Sum of PBDEs	mg/kg	1000	-	ND	PASS
Monobromodiphenyl ether	mg/kg(	P -	20	ND	160
Dibromodiphenyl ether	mg/kg	-	20	ND	0501
Tribromodiphenyl ether	mg/kg		o 20	ND (	1
Tetrabromodiphenyl ether	mg/kg	1/2.5	20	ND	-
Pentabromodiphenyl ether	mg/kg	-763	20	ND	-
Hexabromodiphenyl ether	mg/kg	WES-	20	ND	-
Heptabromodiphenyl ether	mg/kg	· -	20	ND	2775 -
Octabromodiphenyl ether	mg/kg	-	20	ND	1000
Nonabromodiphenyl ether	mg/kg	C	20	ND	- 10
Decabromodiphenyl ether	mg/kg	- 0	20	ND \off	-
Dibutyl phthalate (DBP)	mg/kg	1000	100	ND	PASS
Butyl benzyl phthalate (BBP)	mg/kg	1000	100	OND	PASS
Bis(2-ethylhexyl) phthalate (DEHP)	mg/kg	1000	100	MD	PASS
Diisobutyl phthalate (DIBP)	mg/kg	1000	100	ND	PASS
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## SAMPLE PHOTO



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## Statement

- This report is issued by The CAS Testing Technical Services (GuangZhou) Co.,Ltd. (hereinafter referred to as "Our Company").
- 2. This report is invalid if not affixed with authorized stamp of test and paging seal.
- This report is invalid without signature of verifier and approver.
- 4. This report is invalid if being supplemented, deleted or altered.
- 5. Without written permission of our Company, this report can not be reproduced in part (except in whole).
- 6. The result(s) shown in this report refer only to the sample(s) tested, but do not apply to the same batch, size or brand of products (except the test samples) or to prove the related methods of making, processing or production of the test sample(s), or the correctness and rationality of processes or process.
- Objections to this report must be submitted to our Company within 15 days. Otherwise, it will automatically deem to have accepted this report.
- 8. The Client shall be responsible for the accuracy, authenticity and completeness of the samples and information submitted for inspection, and the disputes arising therefrom shall be borne by the Client.
- 9. As any reports is issued as a result of this application for testing services, our Company will strictly keep confidentiality to the Clients. Except where disclosure is required on the basis of laws, regulations, judgments, and rulings (including in accordance with summons, court, or government proceedings).
- 10. The result(s) or conclusion(s) shown in this report about the description of the characteristics, composition, properties or quality are based on the specific time, methods and applicable criteria. Using different methods and criteria or under different environmental conditions for testing may come to different conclusions.
- 11. Since our Company's causes lead to modify the contents of this report, our Company shall reissue this report and bear the modification cost. The Client shall return the original report. Since the Client's causes lead to modify the contents of this report, the Client need to submit an application form for the change of report to our Company. The Client shall bear the modification cost and return the original report if our Company approves to reissue this report.
- 12. The English version of this statement is translated from the Chinese one. If there is any disagreement between them, the Chinese version will be the final explanation.