

The following sample(s) was/were submitted and identified on behalf of the clients as : Alkaline Button Cell

SGS Job No. : CP20-010490 - GZ

Model No. : LR44H

Client Ref. Info. : Applicant declares, the materials and weight percentage of below models are exactly same as the tested model:

AG13 (LR44, LR44H, LR1154, LR1154H), AG0 (LR521, LR521H, LR63, LR63H), AG1 (LR621, LR621H, LR60, LR60H), AG2 (LR726, LR726H, LR59, LR59H), AG3 (LR41, LR41H, LR736, LR736H), AG4 (LR626, LR626H, LR66, LR66H), AG5 (LR754, LR754H, LR48, LR48H), AG6 (LR920, LR920H, LR69, LR69H), AG7 (LR927, LR927H, LR57, LR57H), AG8 (LR1120, LR1120H, LR55, LR55H), AG9 (LR936, LR936H, LR45, LR45H), AG10 (LR1130, LR1130H, LR54, LR54H), AG11 (LR721, LR721H, LR58, LR58H), AG12 (LR1142, LR1142H, LR43, LR43H), 23A (8LR932, 8LR932H), 27A (86R732, 8LR732H, 8LR632, 8LR632H)

Manufacturer :

Date of Sample Received : 24 Mar 2020

Testing Period : 24 Mar 2020 - 28 Mar 2020

Test Requested : Selected test(s) as requested by client.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Conclusion : The submitted battery sample does not exceed the limit mentioned in European Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU.

When tested as specified by the client, the tested parameters comply with the Mercury content requirement of the US Mercury – Containing Battery Management Act Public Law No. 104-142 (1996).



## Test Report

No. CANEC2003570103

Date: 29 Mar 2020

Page 2 of 6

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

*Violet Shi*

Violet, Shi  
Approved Signatory



Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN20-035701.003	Button cell

Remarks :

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

**European Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU– Heavy Metals Content in Batteries and Accumulators**

Test Method : SGS In House Method (GZTC CHEM-TOP-068), analysis was performed by ICP-OES.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>
Cadmium (Cd)	0.0020	%(w/w)	0.0010	ND
Lead (Pb)	-	%(w/w)	0.0010	ND
Mercury (Hg)	0.0005	%(w/w)	0.0001	ND

**Comment** **Pass**

Notes :

- (1) Results shown are of total weight of the battery sample.
- (2) According to the European Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU, all types of battery shall include the chemical symbol Lead when containing more than 0.004% of Pb.

**US Mercury-Containing Battery Management Act Public Law 104-142(1996)-Mercury (Hg)**

Test Method : SGS In House Method (GZTC CHEM-TOP-068), analysis was performed by ICP-OES.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>
Mercury (Hg)	*	mg/cell	0.1	ND

**Comment** **PASS**

Notes :



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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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(1) Limit shown is with reference to the US Mercury – Containing Battery Management Act Public Law No 104-142 (1996).

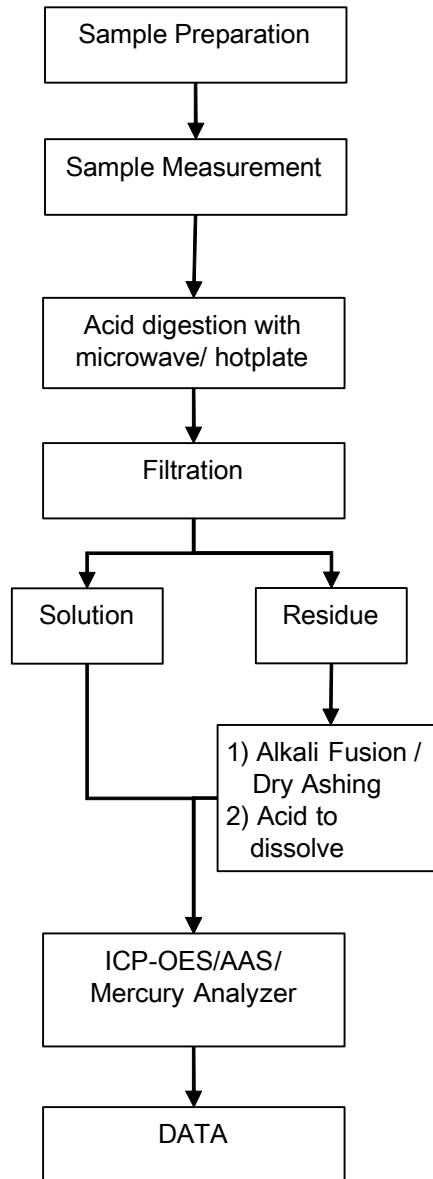
Table 1

Battery type	MDL	Limit*
Alkaline-manganese button cell	0.1mg/cell	25mg/cell
Zinc-Carbon battery	0.1mg/kg	ND
Alkaline-manganese battery	0.1mg/kg	ND
Other battery	0.1mg/kg	-



ATTACHMENTS

Battery Testing Flow Chart



Sample photo:



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*