

Test Report

No.: SZXEC25004803101

Date: Dec 16, 2025

Page 1 of 5

Client Name: GUANGDONG LIWANG NEW ENERGY CO.,LTD.

Client Address: NO 10,LIANTANGJIAO 2ND ROAD,TANGXIA TOWN,DONGGUAN CITY,GUANGDONG PROVINCE,CHINA

Sample Name: Alkaline Zinc-Manganese Dioxide Battery

Model No.: LR6 AA

Client Ref. Information: LR03,LR14,LR20,LR1,6LR61

Sample Type: Portable battery (non-zinc-air button cell)

The above sample(s) and information were provided by the client.

SGS Job No.: SZP25-062432

Sample Receiving Date: Dec 09, 2025

Testing Period: Dec 09, 2025 ~ Dec 16, 2025

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

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

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

Test Requirement	Conclusion
US Mercury-Containing Battery Management Act Public Law 104-142(1996)-Mercury (Hg)	Pass
Annex I of Regulation (EU) 2023/1542– Heavy Metals Content in batteries and waste batteries	Pass

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

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Approved Signatory

Scan to see the report



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Shenzhen Branch

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Test Report

No.: SZXEC25004803101

Date: Dec 16, 2025

Page 2 of 5

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A	SZX25-0048031-0001	"Alkaline Zinc-Manganese Dioxide Battery"
SN2	A2	SZX25-0048031-0001.C002	"Battery"

Remarks:

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

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

Test Method: SGS In House Method, analysis was performed by ICP-OES or Hg-analyzer.

Test Item(s)	Limit	Unit(s)	MDL	A2
Mercury(Hg)	*	mg/kg	0.1	ND
Conclusion				Pass

Notes:

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

(2) Mercury Reference Information: (requirement of the US Mercury – Containing Battery Management Act Public Law No. 104-142 (1996)).

a) No person shall sell, offer for sale, or offer for promotional purposes any alkaline-manganese battery manufactured on or after the date of enactment of this Act, with a mercury content that was intentionally introduced (as distinguished from mercury that may be incidentally present in other materials), except that the limitation on mercury content in alkaline-manganese button cells shall be 25 milligrams of mercury per button cell.

b) No person shall sell, offer for sale, or offer for promotional purposes any zinc-carbon battery manufactured on or after the date of enactment of this Act, that contains mercury that was intentionally introduced.

c) No person shall sell, offer for sale, or offer for promotional purposes any button cell mercuric-oxide battery for use in the United States on or after the date of enactment of this Act.

d) On or after the date of enactment of this Act, no person shall sell, offer for sale, or offer for promotional purposes a mercuric-oxide battery for use in the United States.

Table 1

	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	-

Annex I of Regulation (EU) 2023/1542– Heavy Metals Content in batteries and waste batteries

Test Method: SGS In House Method, analysis was performed by ICP-OES or AAS or Hg-analyzer.



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Test Report

No.: SZXEC25004803101

Date: Dec 16, 2025

Page 3 of 5

Test Item(s)	Limit	Unit(s)	MDL	A
Lead(Pb)	0.01	%	0.0010	ND
Cadmium(Cd)	0.002	%	0.0010	ND
Mercury(Hg)	0.0005	%	0.0001	ND
Conclusion				Pass

Notes:

(1) Restriction on substances

Column 1 Designation of the substance or group of substances	Column 2 Conditions of restriction
1. Mercury CAS No 7439-97-6 EC No 231-106-7 and its compounds	Batteries, whether or not incorporated into appliances, light means of transport or other vehicles, shall not contain more than 0,0005 % of mercury (expressed as mercury metal) by weight
2. Cadmium CAS No 7440-43-9 EC No 231-152-8 and its compounds	Portable batteries, whether or not incorporated into appliances, light means of transport or other vehicles, shall not contain more than 0,002 % of cadmium (expressed as cadmium metal) by weight
3. Lead CAS No 7439-92-1 EC No 231-100-4 and its compounds	1. From 18 August 2024, portable batteries, whether or not incorporated into appliances, shall not contain more than 0,01 % of lead (expressed as lead metal) by weight. 2. The restriction set out in point 1 shall not apply to portable zinc-air button cells until 18 August 2028.

(2) According to the EU New Battery Regulation (EU) 2023/1542, portable batteries (non portable zinc-air button cells) containing between 0,004 %-0.01 % lead, shall be marked with the chemical symbol for the metal concerned: Pb.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w=0$) stated in ILAC-G8:09/2019.



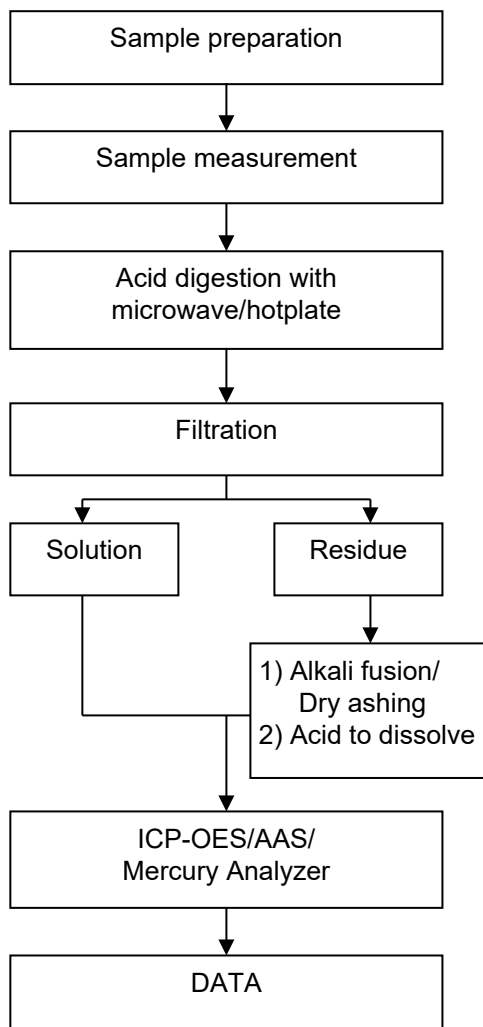
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Battery Testing Flow Chart



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Page 5 of 5

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***



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