Customer:
客户名称:
Customer Address:

Sample Name: 样品名称:	Zinc manganese button battery 锌锰纽扣电池
Tested Model: 主测型号:	AG13(LR44) AG13(LR44)
Additional Model: 附加型号:	AG10(LR1130),AG3(LR41) AG10(LR1130),AG3(LR41)
Manufacturer: 制造商:	

The above samples and information are provided by the customer
以上样品及信息由客户提供

Sample Received Date: 样品接收日期:	Dec 25, 2024 2024年12月25日
Test Period: 检测周期:	Dec 25, 2024 to Jan 02, 2025 2024年12月25日至2025年01月02日
Test Requirements: 检测要求:	Test according to customer requirement 根据客户要求检测
Test Method: 检测方法:	Please refer to next page(s) 参见下一页
Test Result: 检测结果:	Please refer to next page(s) 参见下一页
Test Conclusion: 检测结论:	**PASS** **符合**

Result Summary:
检测结果概要:

Test Requested **检测要求**	**Conclusion** **结论**
1. European batteries Regulation (EU) 2023/1542—Lead, Cadmium & Mercury content 欧盟电池法规(EU)2023/1542—铅，镉和汞的含量	**PASS** **符合**

Soar Testing Certification (GuangDong) Co., Ltd.

WRITTEN BY	REVIEWED BY	APPROVED BY
张亚婷 Zooey Zhang	符克霞 Kira Fu	吴峥荣 Eric Wu 吴成友 Frank Wu
		批准签署人 Approved signatory

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Lab name: Soar Testing Certification (GuangDong) Co., Ltd. **Address:** Room 1093, No.12, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China
Post Code: 523945 **Tel:** (86-769) 38937518 **E-mail:** service@soar-cert.com **Website:** http://www.soartestlab.com

Test Result(s):
检测结果：
Description of test sample:
检测样品描述:

Sample No. 样品编号	Item / Component Description(s) 描述	Location(s) 部位	Style(s)/Model(s) 类别/型号
1.	Zinc manganese button battery 锌锰纽扣电池	Refer to photo 详见照片	AG13(LR44) AG13(LR44)

1. European batteries Regulation (EU) 2023/1542—Lead, Cadmium & Mercury content
欧盟电池法规(EU)2023/1542—铅，镉和汞的含量

Test Method: Refer to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013,analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer(ICP-OES).

检测方法：参考IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, 采用电感耦合等离子体发射光谱仪(ICP-OES)进行分析。

Test Items 检测项目	Limit 限值	Unit 单位	MDL	Result 结果
				No.1#
Lead (Pb) 铅 (Pb)	0.01#	%	0.0002	N.D.
Mercury (Hg) 汞 (Hg)	0.0005##	%	0.0002	N.D.
Cadmium(Cd) 镉(Cd)	0.002#	%	0.0002	N.D.
Conclusion 结论				PASS 符合

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Note:

1. % = percentage by weight.
2. 0.0001% = 1 mg/kg.
3. MDL = Method Detection Limit.
4. N.D. = Not Detected (< MDL).
5. Portable battery：a battery that is sealed, weighs 5 kg or less, is not designed specifically for industrial use and is neither an electric vehicle battery, an LMT battery, nor an SLI battery
6. The restriction of cadmium is applicable for portable batteries.
7. The restriction of lead is applicable for portable batteries from 18 August 2024.
   The restriction of lead shall not apply to portable zinc-air button cells until 18 August 2028.
8. “#”= Applicable for portable batteries.
9. “##”= Applicable for all kind of batteries.

注释:

1. % = 重量百分比
2. 0.0001% = 1 mg/kg
3. MDL = 方法检出限
4. N.D. = 未检出(<方法检出限)
5. 便携式电池：密封式，5kg以下，不是专门为工业用途设计的且不属于其他类别的电池
6. 镉的限量针对便携式电池
7. 铅的限量针对便携式电池
   从2024年8月18日起限制便携式电池中铅的含量；2028年8月18日前铅的限制不适用锌空气电池
8. “#”= 限值适用于便携式电池
9. “##”= 限值适用于所有类别的电池

Remark 备注：

As specified by applicant, to test content in the selected materials of the submitted samples. The test results are only responsible for the submitted sample. The test report is only for customer research, teaching, internal quality control, product development and other purposes, for reference only.

根据申请人的要求，对提交样品所选的材料进行检测。测试结果仅对提交的样品负责。本检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的，仅供参考。

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Lead, Cadmium & Mercury Testing Flow Chart
铅，镉和汞 检测流程图

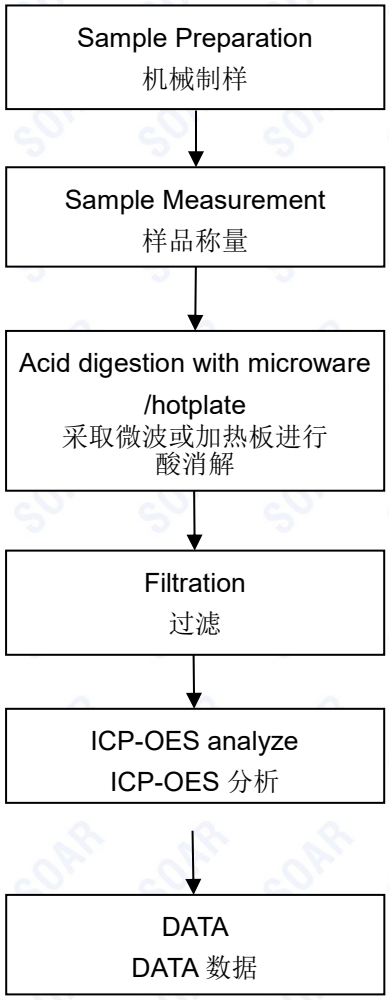

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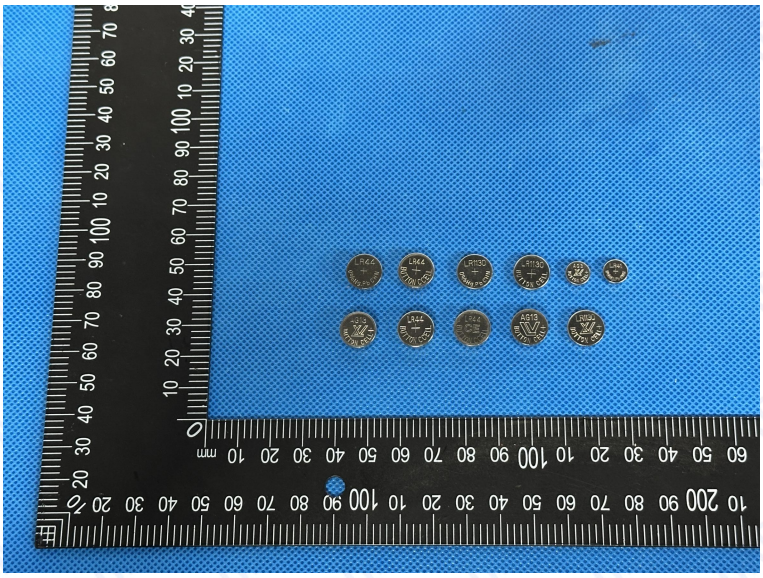
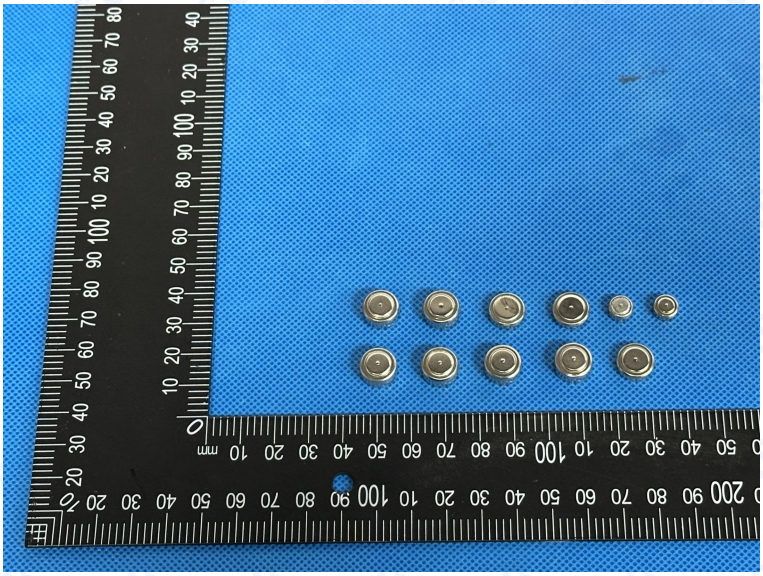
Photo of the Sample:
样品照片:





The photo is for use with SOAR original report only.
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*** End of Report ***
*** 报告结束 ***

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