



材料安全数据表

Material Safety Data Sheets

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委托方 : 江门金刚电源制品有限公司
Applicant : Goldtium(Jiangmen)Energy Products Co. Ltd.
地址 : 广东省江门市蓬江区永盛路 83 号 1 栋、2 栋
Address : Building 1&2, No.83 Yongsheng Street, Pengjiang District, Jiangmen City, Guangdong Province

样品名称 : 碱性锌锰无汞电池 GLR6A LR6 GSLR6A AA 电池 1.5V 2500mAh
Name of sample : Mercury Free Alkaline Zinc Manganese Battery GLR6A LR6 GSLR6A AA size 1.5V(2500mAh)
产品型号 : GLR6A
Product Model
商标 : Golden power
Trade Name
接收日期 : 2023 年 12 月 11 日
Receiving Date : Dec. 11, 2023
签发日期 : 2023 年 12 月 18 日
Issue Date : Dec. 18, 2023
测试场所 : 广东省广州市番禺区大龙街竹山工业路 47-3
Test Location : #47-3 industrial road, Zhushan village, Dalong street, Guangzhou, China.

Signed for and on behalf of
Shenzhen United Testing Technology Co., Ltd
深圳市优耐检测技术有限公司
授权签名

Liu Ze/刘泽

Approved Signatory/批准签发人

Jan. 01, 2024

Effective Date/生效日期



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SECTION 1 - CHEMICAL AND COMPANY IDENTIFICATION	
第 1 部分 化学品及企业标识	
Name of Sample 样品名称:	碱性锌锰无汞电池 GLR6A LR6 GSLR6A AA 电池 1.5V 2500mAh Mercury Free Alkaline Zinc Manganese Battery GLR6A LR6 GSLR6A AA size 1.5V(2500mAh)
Type/型号:	GLR6A
Manufacturer 生产单位:	Goldtium(Jiangmen)Energy Products Co. Ltd. 江门金刚电源制品有限公司
Manufacturer Address 生产单位地址:	Building 1&2,No.83 Yongsheng Street, Pengjiang District, Jiangmen City, Guangdong Province 广东省江门市蓬江区永盛路 83 号 1 栋、2 栋
Emergency Telephone 应急电话:	0750-3500088-2213

SECTION2 – HAZARDS IDENTIFICATION
第 2 部分 危险性概述
Hazards Identification/危害识别: Do not short circuit, recharge, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product. Risk of fire or explosion. 请勿短路, 充电, 穿刺, 焚烧, 挤压, 浸泡, 强制放电或暴露在高于产品声明的工作温度范围的温度下。有火灾或爆炸的危险。 Under normal conditions of use, the electrode materials and liquid electrolyte they contain are not exposed to the outside, provided the battery integrity is maintained and seals remain intact. Risk of exposure only in case of abuse (mechanical, thermal, electrical) which leads to the activation of safety valves and/or the rupture of the battery containers. Electrolyte leakage, electrode materials reaction with moisture/water or battery vent/explosion/fire may follow, depending upon the circumstances. 在正常使用条件下, 它们所含的电极材料和液体电解质不会暴露在外面, 只要保持电池完整性并且密封保持完整。仅在滥用(机械, 热, 电)的情况下暴露风险, 这会导致安全阀的激活和/或电池容器的破裂。根据具体情况, 可能会出现电解液泄漏, 电极材料与湿气/水反应或电池通风/爆炸/火灾
Emergency Overview/紧急情况概述: Caution: Avoid contact and inhalation the electrolyte contained inside the battery. 警告:避免接触和吸入电池内部材料。

SECTION3 – COMPOSITION/INFORMATION ON INGREDIENT		
第 3 部分 成分/组成信息		
Ingredient/成分	CAS No./CAS 号	Weigh/含量 (%)



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Zinc powder 锌粉	7440-66-6	25
manganese dioxide 二氧化锰	1313-13-9	21
Potassium hydroxide 氢氧化钾	1310-58-3	6
Nylon-6 尼龙胶料	32131-17-2	4
Acetylene black 乙炔黑	1333-86-4	5
Polyethylene 聚乙烯	9002-88-4	5
Pure water 纯水	7732-18-5	8
Aluminum 铝箔	91728-14-2	3
Calcium stearate 硬脂酸钙	1592-23-0	3
Barium sulfate 硫酸钡	7727-43-7	5
Zinc oxide 氧化锌	1314-13-2	6
Graphite 石墨	7782-42-5	9

SECTION 4 – FIRST AID MEASURES

第 4 部分 急救措施

Eye Exposure/眼睛接触:

In case of contact with eyes, flush with copious of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

如果接触眼睛，分开眼睑用大量的水冲洗至少 15 分钟，如有不适感，立即就医。

Skin Exposure/皮肤接触:

If the internal battery materials of an opened battery cell come into contact with skin, immediately flush with plenty of water.

如皮肤不慎接触到拆开的电池的內部材料，马上用大量的水冲洗。

Inhalation Exposure/吸入:

If inhaled the internals of battery vomiting. Seeking Immediate medical attention.

如因吸入电池内部物质发生呕吐，需马上需求医护人员的帮忙。

Ingestion Exposure/食入:

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

如不慎吞入电池，立即就医。没有医护人员的直接协助，勿催吐。



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SECTION 5 – FIRE FIGHTING MEASURES

第 5 部分 消防措施

Danger characteristic/危险特性:

Exposure to excessive heat can cause venting of the liquid electrolyte. Battery may burst and release hazardous decomposition products when exposed to a fire situation.

暴露在过热环境下会导致电解液的泄漏。电池在火灾环境中暴露可能破裂并释放危险分解物质。

Hazardous combustion products/危险燃烧产物:

Corrosive gas may be emitted during fire.

可能会发出腐蚀性气体

Fire-Fighting method& media/消防方法及灭火剂:

The staff must equip with filtermask (full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire in the upwind direction. Remove the container to the open space as soon as possible .Spray water on the containers in the fireplace to keep them cool until finish extinguishment

穿戴自给式呼吸器和完整的防护装备，将容器搬离火灾区域，向容器壁喷水以到达冷却的目的，直到完全灭火。

Media: plenty of water, dry chemical powder or carbon dioxide .

灭火剂：大量的水，干粉或二氧化碳

SECTION 6 – ACCIDENTAL RELEASE MEASURES

第 6 部分 泄漏应急处理

Accidental/非主要的:

If the battery breakage and electrolyte leakage, evacuate personnel until the smoke cleared.

如果电池破损和电解液泄漏，疏散人员直到烟雾消失。

Wipe with a cloth and placed in steel drums into the bag inside. If the battery is hot, away from the scene firstly, cool the battery, so that the steam dissipated. Adequate ventilation.

用布擦拭后放入袋内再放进钢桶。如果电池发热，请先离开现场，冷却电池，使蒸汽消散。通风良好。

Emergency treatment/应急处理:

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the batteries to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate waste.

如果电池内部材料泄漏，试验人员应立即撤离试验区域直到烟气消散。将通风设备打开吹散危险性气体。用抹布擦净试验区域，清除溢出的液体，将泄漏电池放进塑料袋中，然后放进钢制容器中。避免皮肤和眼睛接触或吸入有害气体。



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SECTION 7 – HANDLING AND STORAGE

第 7 部分 操作处置和储存

Handling/操作处置:

1. Do not allow battery terminations to contact each other, or contact with other metals.
电池与电池之间的端子不能接触，或接触其他金属。
2. Do not put the cell or battery into a fire or heat it. Do not solder the cell directly. Do not use or leave the cell or battery in a place near fire or heaters.

电池或电芯不能加热；电池不能直接焊接在一起；电池或电芯不能靠近火源或加热器。

3. Do not expose the battery to excessive physical shock or vibration.
电池不能暴露在极端的物理冲击或振动下。
4. Do not immerse, throw, and wet a battery in water.
电池不能浸泡，放置在水中或放置在潮湿的环境下。
5. Short-circuiting should be avoided. Short circuit will reduce the life of the battery and can lead to ignition of surrounding materials. Physical contact with short-circuited battery can cause skin burn.
电池应避免短路；短路会降低电池的寿命和导致电池周围的材料燃烧。
6. The batteries should not be opened, destroyed or incinerated, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.
电池不能拆开、破坏、焚化，因为会导致电池泄露、破裂或电池密闭容器内的原料释放到环境中。
7. Place the cell beyond the child packing and container.
密封保存，远离儿童。
8. Do not mix old and new batteries together, neither with Ni-Cd, dry batteries or another manufacturer batteries or product.
新旧电池不能一起放置，包括镍镉电池、干电池和其他制造商所生产的电池。

Storage/储存:

1. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks.
电池应该与其他材料分开，储存在一个不可燃的，通风良好的，防喷器保护的结构中，在墙壁和电池堆之间有足够间隙。
2. Keep the sample in the cool, dry and well-ventilated place (temperature: -20°C~30°C humidity: 45~85%). Do not exposure to direct sunlight for long periods. Keep away from fire and heating sources. Don't keep the samples with oxidizer and acid.
将样品保存在阴凉、干燥、通风良好的地方(温度:-20°C~30°C, 湿度:45-85%)。不要长时间暴露在阳光下。远离火源和热源。请勿将产品与氧化剂和酸一起存放。
3. Equip with relevant types and quantities of the extinguishment instruments. The storage place should be equipped with suitable shelter materials for divulgence handling.
配备有相应型号和数量的灭火设备。贮存场所应备有适合处理泄漏的遮蔽材料。



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SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

第 8 部分 接触控制/个人防护

Engineering Control/工程控制:

Keep away from heat and open flame. Supply with sufficient partial air exhaust. Store in a cool, dry place.

不要靠近热源和明火。保持良好的通风排气。储存在阴凉干燥的地方。

Respiratory Protection/呼吸防护:

Not necessary under conditions of normal use. Wear self-contained breathing filtermask if the density exceed in the air. Wear breathing apparatus under the condition of emergency rescue or evacuation.

在正常使用的情况下是不必要的。如果气体浓度超过限值需佩戴自给式呼吸过滤器面具。在紧急救援和疏散的情况下需佩戴呼吸器。

Eyes Protection/眼睛防护:

Not necessary under conditions of normal use. Wear protective glasses if handling a leaking or ruptured battery.

在正常使用的情况下是不必要的。如果处理泄漏或破裂的电池需戴防护眼镜。

Skin and Body Protection/皮肤和身体防护:

Not necessary under conditions of normal use. Wear fireproofing, gas defense clothes in case of handling a leaking or ruptured battery.

正常使用的情况下是不必要的。如果处理泄漏或破裂的电池需穿防火、防毒的衣服。

Hands Protection/手部防护:

Not necessary under conditions of normal use. Wear chemical resistant rubber .

正常使用的情况下是不必要的。戴耐磨橡胶手套。

Other Protections/其它防护:

No smoking, dining and drinking water in the workplace. Keep good habit of hygiene.

在工作场所禁止吸烟、饮食。保持良好的卫生习惯。

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

第 9 部分 理化特性

Appearance: Approximate Multi-colors Cylinder

外观: 多种颜色近圆柱体

Physical state: Solid

物理状态: 固体

Odour: If leaking, smells of medical ether.

气味: 泄漏时, 有刺激性气味。

Relative density: Not applicable unless individual components exposed.

相对密度: 针对单个组分暴露情况, 其他不适用。

pH: Not applicable as supplied.

酸碱度: 不适用

Flash Point: Not applicable unless individual components exposed.

闪点: 针对单个组分暴露情况, 其他不适用。



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Flammability: Not applicable unless individual components exposed.

易燃度: 针对单个组分暴露情况, 其他不适用。

Solubility (water): Not applicable unless individual components exposed

溶解性 (水溶性): 针对单个组分暴露情况, 其他不适用。

Solubility (other): Not applicable unless individual components exposed.

溶解性 (其他): 针对单个组分暴露情况, 其他不适用

SECTION 10 – STABILITY AND REACTIVITY

第 10 部分 稳定性和反应性

Stability 稳定性:

Stable under normal temperature and pressure.

在正常温度和压力下是稳定的。

Distribution of Ban 禁配物:

Strong oxidizer, strong acid and corrosives

避免与强氧化剂、强酸和腐蚀性介质接触。

Conditions to Avoid 避免的条件:

Fire source, heating source, disassemble, external short circuit, crushes, deformation, high temperature above 100°C, direct sunlight and high humidity, immerse in water or overcharge.

火源、热源、拆卸、外部短路、挤压、变形、100°C以上的高温、阳光直射、潮湿环境、浸泡在水中、过放电。

Hazardous Polymerization 危险聚合物:

Will not occur.

不适用

Hazardous Decomposition Products 危险分解产物:

Acid or harmful gas is emitted during fire

火灾时会释放出刺激性或有害气体

SECTION 11 – TOXICOLOGICAL INFORMATION

第 11 部分 毒理学信息

Acute Toxicity 急性毒性:

N/A/不适用

Sub-acute and Chronic Toxicity 亚急性和慢性毒性:

N/A/不适用

Irritation Data 刺激数据:

The internal battery materials may cause irritation to eyes and skin.

内部电池材料可能会引起眼睛和皮肤的刺激。

Sensitization 敏化作用:

The liquid in the battery may cause sensitization to some person.

电池中的液体可能对某些人产生过敏反应。

Mutagenicity 诱变性:

No information is available.



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没有可用的信息。

Carcinogenicity致癌性:
N/A/不适用。

Others其它:

Since the materials in this battery are sealed in the can, the potential for exposure to the components of the battery is negligible, when the battery is used as directed. However technical or electrical abuse of the battery may result in the release of battery contents.

由于材料密封于电池内,潜在的接触电池的组件可以忽略不计,作为电池的指导。滥用电池可能导致释放电池内容物。

SECTION 12 – ECOLOGICAL INFORMATION

第 12 部分 生态学信息

Eco-toxicity/生态毒性:

No data available.

没有现成可用数据。

Biodegradable/生物降解性:

No data available.

没有现成可用数据。

Mobility in soil/土壤中的迁移性:

No data available.

没有现成可用数据。

Bioconcentration or biological accumulation/生物富集或生物积累:

No data available.

没有现成可用数据。

Other harmful effects/其它有害作用:

Don't abandon the battery into environment, may cause water or soil pollution.

不要将电池丢弃到环境中,可能会造成水或土壤的污染。

SECTION 13 - DISPOSAL CONSIDERATIONS

第 13 部分 废弃处置

Appropriate Method of Substance/适当的处置方法:

The battery should be completely discharged prior to disposal in order to prevent short circuit.
电池应该完全放电处理,以防止短路。

The battery contains recyclable materials. It is suggested recycle. Refer to National or Local regulations before handling. Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in National or Local regulations of hazardous waste treatment and hazardous waste transportation.

对于电池可回收的材料,按国家或当地法规处理,建议回收。电池应由许可的专业公司处理。按国家或地方法规进行垃圾处理和危险废物运输。



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SECTION 14 – TRANSPORT INFORMATION 第 14 部分 运输信息	
IATA:	Proper Shipping Name/危险品运输名称: NON REGULATED/非限制性
	UN Number/UN 编号: Not restricted/不受限制
	Hazard Class/危险类别: Not restricted/不受限制
	Packing Group/包装等级: Not restricted/不受限制
	Packaging requirement/包装要求: According to IATA DGR 65 th Edition Special Provisions A123, the batteries are “Not restricted”. 根据 IATA DGR 第 65 版特殊条款 A123, 电池不受限制。
ADR/ RID:	Proper Shipping Name/危险品运输名称: NON REGULATED/非限制性
	UN Number/UN 编号: Not restricted/不受限制
	Hazard Class/危险类别: Not restricted/不受限制
	Packing Group/包装等级: Not restricted/不受限制
	Packaging requirement/包装要求: According to ADR (ECE/TRAN/257) the batteries are “Not restricted”. 根据 ADR (ECE/TRAN/257), 电池是“不受限制的”
IMO:	Proper Shipping Name/危险品运输名称: NON REGULATED/非限制性
	UN Number/UN 编号: Not restricted/不受限制
	Hazard Class/危险类别: Not restricted/不受限制
	Packing Group/包装等级: Not restricted/不受限制
	Packaging requirement/包装要求: According to IMO IMDG Code (Amendment 41-22) the batteries are “Not restricted”. 根据 IMO IMDG 规则 (修正案 41-22), 电池是“不受限制的”。

SECTION 15 – REGULATORY INFORMATION 第 15 部分 法规信息
《Dangerous Goods Regulation》(DGR) 《危险物品规则》 《Recommendations on the Transport of Dangerous Goods Model Regulations》《对危险货物运输的有关规定的建议》 《International Maritime Dangerous Goods》(IMDG) 《国际海运危险货物规则》 《Occupational Safety and Health Act》(OSHA) 《职业安全卫生法》 《Toxic Substances Control Act》(TSCA) 《有毒物质控制法》 《Federal Environmental Pollution Control Act》(FEPCA) 《联邦环境污染控制法》 《Code of Federal Regulations》(CFR) 《美国联邦法规》 《California Proposition 65》《加州 65 提案》 《Consumer Product Safety Act》(CPSA) 《消费产品安全法》 《Safety Drinking Water Act》(CWA) 《安全饮用水法》



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《Resource Conservation and Recovery Act》(RCRA) 《资源保护及恢复法案》
《Technical Instructions for the Safe Transport of Dangerous Goods》《危险品安全运输技术指令》
《The Oil Pollution Act》(OPA) 《石油污染法案》
《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》(SARA) 《超级基金修正案和再授权法案 III(302/311/312/313)》
In accordance with all Federal, State and local laws./根据联邦、州和地方法律。

SECTION 16 – ADDITIONAL INFORMATION

第 16 部分 其他信息

Other Information/其他信息:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty express or implied, With respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damage of any third party or for lost profits or any special, indirect, consequential or exemplary damages arising from using the above information.

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Department/编写:

Shenzhen United Testing Technology Co., Ltd.
深圳市优耐检测技术有限公司
#47-3, Industrial Road, Zhushan Village, Dalong Street, Panyu District, Guangzhou, China.
广州市番禺区大龙街竹山村工业路 47-3

*****报告结束/End of Report*****



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