Material Safety Data Sheet 化学品安全技术说明书

Section 1-Chemical Product and Company Identification
第一节：化学品及企业标识

Battery type: Alkaline Zinc Manganese Dry Battery
电池种类 ：碱性锌锰干电池
Battery Model: AA/ LR6
电池适用型号: AA/LR6
Battery Mass 电池重量：23.5g
Manufacturer's Name : Dongguan Tuobu Electronic Co.,Ltd.
制造商名称：东莞市拓步电子有限公司
Emergency & Information Phone No: 86-13924673080
紧急咨询电话：86-13924673080
Address :No.A,Building 6,Binhe Road,Tianxin Quarter,Huangjiang Town,Dongguan,Guangdong Province ,China
地址：中国，广东省东莞市黄江镇田心村滨河路 6 号 A 栋
URL 网址 :http//:www.highestsz.com E-mail 邮箱: highestsz@126.com

Section 2 - Hazards Identification
第二节： 危险识别

Hazard description 危险性描述 ：
Not dangerous with normal use.Do not dismantle,open or shred the battery ingredients contained within or their ingredients products products could be harmful.
正常使用没有危险，不能拆解、打开或分解电池，里面的材料或成分对某些部位是有害的。
Primary route of Exposure 接触途径：
Inhalation,Ingestion ,Skin contact and Eye contact,
吸入，食入，皮肤接触，眼睛接触
Potential Health Effects 潜在健康影响
Inhalation：Vapors or mists from a ruptured battery may cause respiratory irritation
吸入：破裂的电池散发出来的气味会引起呼吸道刺激。
Ingestion:The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth,esophagus,and gastrointestinal tract.
食入：电池内部的组成成分或原料可以导致嘴，食道和胃肠道的严重化学损伤。
Skin:Skin contact with contents of an open battery can cause severe irritation or burns to the skin
皮肤：皮肤接触到电池的内部化学材料可能会导致刺激损伤皮肤。
Eye:Eye contact with contents of an open battery cn cause severe irritation or burns to the eye.
眼睛：眼睛接触到电池的内部化学材料可能会导致严重的刺激或损伤眼睛。

Section3:Composition/Information on Ingredients

第三节 成分/组成信息

Information about the chemical nature of product:

产品的化学性质信息:

Substance Name 物质名称	Chemical Identification CAS# 化学 CAS 号	EC# EC 号	Approx % Weight 重量
Zinc 锌	7440-66-6	231-175-3	19.5%
Graphite 石墨	7782-42-5	231-955-3	2.8%
Manganese Dioxide 二氧化锰	1313-13-9	215-202-6	41.5%
Potassium Hydroxide 氢氧化钾	1310-58-3	215-181-3	8.5%
Iron 铁	7439-89-6	231-096-4	14.5%
Distilled Water 蒸馏水	7732-18-5	231-791-2	9.5%
Zinc Oxide 氧化锌	1314-13-2	215-222-5	0.4%
Copper 铜	7440-50-8	231-159-6	1.2%
Polyhexamethylene adipamide 聚己二胺	32131-17-2	608-706-6	2.1%

Section 4:First Aid Measures

第 4 节：急救措施

Description of first aid measures

急救措施描述

General information No special measures required

一般无需采取特殊措施

After eye contact

眼睛接触后

Flush eyes with plenty of water for several minutes while holding eyelids open.Get medical attention if irritation persists

保持眼睑张开，用大量水冲洗眼睛几分钟，如果刺激持续，立即就医.

After skin contact

皮肤接触后

Remove contaminated clothing and rinse skin with plenty of water or shower for 15minutes.Get medical attention if irritation persists.

脱掉被污染的衣服,用大量的水冲洗至少 15 分钟，如果刺激持续，立即就医.

After inhalation

吸入后

Remove victim to fresh area.Administer artificial respiration if breathing is difficult.Seek medical attention.

把受害者移到新的地方，呼吸困难时进行人工呼吸，寻求医疗救助。

After swallowing 吞咽后

Please rinse mouth thoroughly with water.Induce vomiting under the guidance of professional personage.Please seek medical treatment in time.

立即用清水漱口，在专业人士的指导下催吐，速就医。

Section 5:Fire-Fighting Measures
第五节：消防措施

Fire-extinguishing Methods and Extinguishing Media:Please use Dry chemical,soda ash,lime or sand fire extinguisher and other proper fire extinguishing media.
灭火方法及灭火剂:请使用干粉、苏打灰、石灰或沙子灭火器和其他合适的灭火介质。
Unsuitable extinguishing media:No information available
不合适灭火介质：无可用信息
Hazardous Combustion Products:carbon monoxide,carbon dioxide gases or vapors may evolve on burning
燃烧产生的危险物品：火灾时可释放一氧化碳，二氧化碳气体或者蒸汽。
Specific protective actions for fire-fighters:
消防员的具体防护措施：
Wear positive pressure self-contained breathing apparatus
戴正压自给式呼吸器。

Section 6:Accidental Release Measures
第六节:泄露应急处理

Personal Precautions,protective equipment,and emergency procedures
个人预防措施，防护装备和应急程序
Restrict access to area until completion of clean-up.Do not touch the spilled material.Wear adequate personal protective equipment.
在清理工作完成之前，禁止进入该区域。不要触摸溢出的物料。穿戴适当的个人防护装备。
Methods and materials for Containment
方法和材料控制
Stop the leak if safe to do so.Contain the spilled liquid with dry sand or earth.Clean up spills immediately.
出于安全，阻止泄露，可以用干砂或沙土来遏制液体泄露，并清理泄露物。

Section 7:Handling and storage
第七节：操作处置与储存

Handling 操作:
Do not handing the batteries in manner that allows terminals to short circuit.Do not open,disassemble,crush or burn battery.
不要以让接头短路的方式对电池进行操作，不要打开分解压或燃烧电池。
Storage 储存：
Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by Other metal objects.Keep out of reach of children. Do not expose the battery to heat or fire.Avoid storage in direct sunlight.Do not store together with oxidizing and acidic materials
不要将电池随意丢在盒子或抽屉里，以免电池之间或电池与其它金属物质发生短路，储存在小孩接触不到的地方，不要将电池暴露在火源及热源附近，避免在阳光直射下存储。不要与氧化和酸性物质存储在一起.

Section 8:Exposure Controls/Personal Protection
第八节：接触控制和个体防护

A complete and good battery is not dangerous. The following is the information after the battery is broken and disassembled.
完整且良好的电池并无危险危害,以下是电池损坏及分解后接触内部材料信息。
The usual precautionary measures for handling chemicals should be followed.

处理化学品时应遵循通常的预防措施。

Keep away from foodstuffs,beverages and feed.

远离食品、饮料和饲料。

Remove all soiled and contaminated clothing immediately.

立即脱去所有被污染的衣物。

Wash hands before breaks and at the end of word.

休息前和结束时洗手。

Respiratory protection:

个人防护设备:

Wear suitable protective mask.

戴上合适的防护口罩。

Hand protection:

手部保护:

Wear appropriate protective gloves to reduce skin contact.

佩戴适当的防护手套，减少皮肤接触。

Eye Protection:

眼睛保护:

Wear safety goggles or eye protection combined with respiratory protection.

戴上护目镜或眼睛保护与呼吸保护相结合。

Skin and Body Protection:

皮肤和身体防护:

Working environment required,wear suitable protective clothing to minimize contact with skin.

工作环境要求，穿合适的防护服，尽量减少与皮肤的接触。

Section 9: Physical and Chemical Properties
第九节：物理化学性质

Physical State 物理状态: Form&Multi color Cylinder plastics film shell,Odour&Odorless，圆柱型，多色，无气味

Change in condition 变化的条件:

pH 酸碱度：	Not applicable 不适用
Flash Point 闪点：	Not applicable 不适用
Flammability 易燃度：	Not applicable 不适用
Relative density 相对密度：	Not applicable 不适用
Solubility (Water)溶解性（水溶性）：	Not applicable 不适用
Solubility(Other)溶解性（其它）：	Not applicable 不适用

Section 10:Stability and Reactivity
第十节：稳定性和反应性

Stability: stable under normal temperatures and pressures.

稳定性：常温常压下稳定.

Conditions to Avoid:Flames,sparks,and other sources of ignition,Incinerate,Deform,Mutilate,Crush, short circuit. incompatible materials。

应避免条件:火焰和其他火源，焚烧，变形，毁伤，粉碎，短路,不相容的材料。

incompatible materials：Oxidizing agents,acid base。

不相容物质:氧化剂、酸碱。

Hazardous decomposition products:carbon monoxide,carbon dioxide

有害分解产物:一氧化碳，二氧化碳。

Section 11:Toxicological Information
第十一节：毒理学信息

Toxicity information is available on the battery ingredients in Section 2,but ,generally not applicable to intact batteries as Used by customers。

毒性信息可以在第 2 节的电池成分中找到，但不适用于客户使用的完整良好的电池。

Section 12:Ecological Information
第十二节：生态学信息

If the battery is disposed of on land or in water, the battery case may corrode and liquid leak from the battery. Ecological information has not been reported。

如果电池被丢弃在陆地或水中，电池外壳可能腐蚀和液体泄漏，生态信息尚未报道。

Section13:Disposal Considerations

第十三节废弃处置

Dispose of the batteries according to government regulations。

根据国家政府规定处理电池。

Section 14:Transport Information
第十四节：运输信息

Transport Fashion:by air,by sea,by railway,by road

运输方式:空运、海运、铁路、公路。

The Batteries in all forms of transportation (e.g. Truck, air, or sea) must be packaged in a safe and responsible manner. Regulatory concerns form all agencies for safe packaging require that batteries be packaged in s manner that prevents short circuits and be contained in (Strong Carton / Packaging) that prevents spillage of contents

所有运输形式（如卡车、空运或海运）的电池必须以安全可靠的方式包装。所有机构出于安全包装的监管考虑，要求电池以防止短路的方式包装，并装在坚固纸箱包装中，防止箱中产品散乱溢出。

Alkaline Battery (sometime referred to as “Dry Cell” are not listed as dangerous goods under the ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road, The IMDG International Maritime Dangerous Goods Code, UN Dangerous Good Regulations, IATA Dangerous Goods Regulation, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR).These batteries are not subject to the dangerous goods regulations provided they meet the requirement contained in the following special provisions.

碱性电池（也称为“干电池”）未被列为 ADR 欧洲道路危险货物运输协定、IMDG 国际海上危险货物规则、联合国危险货物条例、IATA 危险货物法规、ICAO 技术说明和美国危险品法规（49 CFR）下的危险品电池不受危险品法规的约束，前提是它们符合以下特殊规定中的要求。

Regulatory Parties 监管方	Special Provisions 特别规定
ADR	Not Regulated
IMDG	Not Regulated
UN, ICAO	Not Regulated
US DOT	49 CFR 172.102 Provision 130
IATA,	A123,

According to Special Provision A123 of the 2024 IATA Dangerous Goods Regulations 65th Edition,Alkaline-manganese battery ,Zinc-carbon battery or battery powered device equipment packed in such a way to prevent short circuits or the generation dangerous quantities of heat and meet the special provisions listed above. In addition, The IATA Dangerous Goods Regulations ICAO Technical Instructions require the words " Not Restricted" and the Special Provision No: A123 be provided on the air waybill, when an air waybill is issued.

根据 2024 年 IATA（危险物品规则）第 65 版特别规定 A123，碱性电池、碳性电池、此类电池供电的设备的包装方式应防止短路产生危险热量，并符合上述特别规定。此外国际航空运输协会危险货物条例要求在签发航空货运单时，在航空货运单上注明"不受限制"字样和第 A123 号特别规定。

Proper shipping name:Dry battery

正确运输名称：干电池

IMO international Maritime Dangerous goods Code(2022 Edition)（A mendment 41-22), The substance is not subject to IMO IMDG Code.

根据 IMO IMDG （2022 版 A mendment 41-22）可按普通货物条件办理，不受 IMO IMDG 规则约束限制。

The battery is not restricted according to JT/T 617.2-2018"Regulations concerning road transportation of dangerous goods-Part2:Classification"

根据 JT/T617.2-2018(危险货物道路运输规则 第二部分：分类）可按普通货条件办理。

The battery is not restricted according to"List of Railway Dangerous Goods(2009)"

根据（铁路危险货物品名表）（2009 年版）可按普通货物条件办理。

Section 15:Regulatory Information
第十五节：法规信息

Special requirement be according to the local regulations.

特殊要求按国家政府当地规定执行。

Section 16:Other Information
第十六节：其它信息

1.Issue Date 签发日期 2024-01-01 Valid until 有效期： 2024-12-31。

2.Explanation : This MSDS (Material Safety Data Sheets) contains health, safety and environment information, and waswritten by reflecting our company' s current technology. This data is not a guarantee for the product' s character or quality, and should be used only as a reference in relation to safe use of the product.

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