



材料安全数据表 Material Safety Data Sheet

样品名称: 铅酸蓄电池

Sample Name: LEAD ACID STORAGE
BATTERY/AUTOMOTIVE BATTERY/CAR
BATTERY/MOTOR BATTERY/ELECTRIC

委托单位: 英德奥克莱电源有限公司

Applicant: YINGDE AOKLY POWER CO, LTD

广东检验检疫技术中心

Guangdong Inspection & Quarantine Technology Center





材料安全数据表 Material Safety Data Sheet

1. 化学品及企业标识 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
样品名称 Name of goods	铅酸蓄电池 AUTOMOTIVE BATTERY (MOTOR BATTERY/CAR BATTERY/ LEAD ACID BATTERY)
样品型号 Type/Mode	N150
品牌 Brand	AOKLY/AK/NEW EARTH/FORGO/DAD/GALES/ZLB/HONSHU/UPSLION/FLESH POWER/EVIRON AND CUSTOMER AUTHORIZED BRANDS.
委托单位 Commissioned by	英德奥克莱电源有限公司 YINGDE AOKLY POWER CO, LTD
委托单位地址 Commissioner address	英德市东华镇华侨工业园 HUAQIAO IND ZONE DONGHUA TOWN, YINGDE CITY, GUANGDONG, CHINA
生产单位 Manufacturer	英德奥克莱电源有限公司 YINGDE AOKLY POWER CO, LTD
生产单位地址 Manufacturer address	英德市东华镇华侨工业园 HUAQIAO IND ZONE DONGHUA TOWN, YINGDE CITY, GUANGDONG, CHINA
应急电话 Emergency telephone call	86-20-86861998



2. 成分/组成信息 COMPOSITION INFORMATION

No.	Ingredients Name 成分名称	Rate 比例
1	Pb-Sb 铅锑	72%
2	Lead dioxide 二氧化铅	
3	Lead oxide 一氧化铅	
4	PP 聚合物	12%
5	Fiber 纤维	8%
6	Other 其他	8%

3. 危险性概述 Hazards Identification

有损人体健康的影响和症状:

Adverse human health effects and symptoms:

吸入:

Inhalation:

在正常使用条件下, 不会对健康造成影响。但是, 电池打开后, 其相关成分可引起呼吸道刺激。

Under normal conditions of use, no health effects are expected. Contents of an open battery can cause respiratory irritation.

皮肤:

Skin:

在正常使用条件下, 不会对健康造成影响。

Under normal conditions of use, no health effects are expected

眼睛:

Eye:

在正常使用条件下, 不会对健康造成影响。暴露在灰尘环境时, 可带来身体刺激。

Under normal conditions of use, no health effects are expected. Exposure to dust may cause irritation.

食入:

Ingestion:

在正常使用条件下, 不会对健康造成影响。铅食入可导致腹痛、恶心、呕吐、腹泻和剧烈痉挛。

Under normal conditions of use, no health effects are expected. Lead ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping.



铅中毒的症状包括头疼、疲劳、腹痛、食欲不振、肌肉疼痛和虚弱、睡眠不良、以及兴奋。铅的吸收可引起恶心、体重变轻、腹痛、以及手臂 / 大腿 / 关节处疼痛。

Symptoms of lead toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability. Lead absorption may cause nausea, weight loss, abdominal spasms, and pain in arms, legs and joints.

长期接触铅时的影响包括中枢神经系统 (CNS) 受损、肾功能异常、贫血、神经病变 (特别是造成运动神经影响导致腕下垂)、以及潜在性生殖系统的影响。短时接触硫酸时, 可引起剧烈刺激、烧伤、以及永久性组织受损。长期接触硫酸时, 可引起牙釉质腐蚀、鼻炎、以及喉咙和呼吸系统炎症。

Effects of chronic lead exposure may include central nervous system (CNS) damage, kidney dysfunction, anemia, neuropathy particularly of the motor nerves with wrist drop, and potential reproductive effects. Acute exposure to sulfuric acid causes severe irritation, burns and permanent tissue damage to all routes of exposure.

Chronic exposure to sulfuric acid may cause erosion of tooth enamel, inflammation of nose, throat and respiratory system.

4. 急救措施 First aid measures

眼睛:

若在通常或建议的条件下使用材料, 则无需采取急救措施。万一眼睛接触到相关物质, 则需用水冲洗眼睛。必要时送医院医治。

Eye

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If contact with material occurs flush eyes with water. Get medical attention.

皮肤:

若在通常或建议的条件下使用材料, 则无需采取急救措施。立即脱去占有电解液的衣服和鞋子。若接触到铅材料, 需用肥皂和大量清水清洗沾污的皮肤部分。

Skin

First aid is not expected to be necessary. Immediately remove contaminated clothing and shoes. If exposure to lead component occurs, wash contaminated skin with plenty of soap and water.

吸入:

若在通常或建议的条件下使用材料, 则无需采取急救措施。若情况或症状变得严重, 则需将吸入者移至新鲜空气处。若出现呼吸困难, 则应输氧处理。必要时送医院医治。

Inhalation

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Get medical attention.

食入:

若在通常或建议的条件下使用材料, 则无需采取急救措施。如不慎吞入电池的铅成分, 应送医院医治。

Ingestion

First aid is not expected to be necessary Get medical attention immediately. If lead portion of battery is ingested get medical attention immediately

急救人员的自我保护措施:



需要实施人工呼吸时, 应使用带单向阀的袖珍面罩, 或者其他合适的医用呼吸设备。

Self-protection of the first aider:

If artificial respiration is required use a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**5. 消防措施
Fire-fighting measures**

灭火介质:

Extinguishing media:

合适的灭火介质:

Suitable extinguishing media:

CO₂、化学干粉和泡沫

CO₂, dry chemical or foam

不宜使用的灭火介质:

Unsuitable extinguishing media:

避免使用水

Avoid using water

物质或混合物所致特殊危害性

Special hazards arising from the substance or mixture

燃烧时具有有害性成分:

Special hazards arising from the substance or mixture

电池的含铅部分燃烧时, 可产生有毒金属烟雾、蒸汽或灰尘。

Lead portion of battery will likely produce toxic metal fume, vapor or dust.

给消防人员的建议:

若电池在充电, 应切断电源。不可让金属物件同时接触电池(含电池单体)的正负极。

佩戴正压自持呼吸器(SCBA)。消防队员的标准作业服仅能提供有限的保护。



Advice for fire-fighters:

If batteries are on charge, shut off power. Do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries.

Wear a positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

6. 泄露应急处理 Accidental release measures

个人保护性设备:

Personal protective equipment:

佩戴化学手套、防护镜、防酸服装与靴子。通风不畅时还应佩戴防毒面具。

Wear chemical gloves, goggles, acid resistant clothing and boots, respirator if insufficient ventilation.

环境方面的预防措施:

Environmental precautions:

防止流入排水沟、下水道、地下室、或有限区域范围。消防水或稀释水可能具有毒性和腐蚀性，可引起不可逆转的环境影响。

Prevent entry into waterways, sewers, basements or confined areas. Runoff from fire control and dilution water may be toxic and corrosive and may cause adverse environmental impacts.

控制措施:

For containment:

电池出现开裂时，在确保没有危险的情况下，用泥土、砂石或其他难燃性材料防止其泄露。同时，认真中和已泄露的液体。

In the event of a battery rupturing; stop the leak if you can do it without risk. Absorb with earth, sand or other non-combustible material. Cautiously neutralize spilled liquid.

7. 操作处置和储存 Handling and storage

Store batteries in cool, dry, well-ventilated areas with impervious surfaces and adequate containment in the event of spills. Batteries should also be stored under roof for protection against adverse weather conditions. Separate from incompatible materials. Store and handle only in areas with adequate water supply and spill control. Avoid damage to containers. Keep away from fire, sparks and heat. Precautionary Labeling: POISON-CAUSES SEVERE BURNS DANGER-CONTAINS SULFRIC ACID

搬运和储存应在阴凉、干燥、通风良好的区域，表面不透水，并在发生泄漏时进行适当的密封。电池也应存放在屋顶下，以防恶劣天气。与不相容材料分离。仅在充足供水和溢出控制的区域存放和处理。避免损坏容器。远离火、火花和热。预防性标签：中毒导致严重烧伤危险-含有亚硫酸。



8. 接触控制/个人防护

Exposure controls/personal protection

接触管理

Exposure controls

合适的工程管理:

Appropriate engineering controls:

电池应在通风良好的区域储存和装载。采用一般稀释性通风即可。

Store and charge in a well-ventilated area. General dilution ventilation is acceptable.

个人防护用品:

Personal protective equipment:

防护品标识:

Pictograms:



眼睛/面部防护:

Eye/Face protection:

佩戴眼睛防护用品(护目镜、面罩或侧面遮盖的眼镜)。

Wear protective eyewear (goggles, face shield or safety glasses with side shields).

皮肤防护:

Skin protection:

穿戴防护性手套。

Wear protective gloves.

根据工业卫生的实践经验,在标准使用条件下,无需采取皮肤防护措施。若接触存在泄漏的电池,则应采取相关措施以避免皮肤直接接触。在过度接触或紧急条件下,工作人员应着耐酸工作服和工作靴。

No skin protection is ordinarily required under normal conditions of use. In accordance with industrial hygiene practices. If contact with leaking battery is expected, precautions should be taken to avoid skin contact. Under severe exposure or emergency conditions, wear acid resistant clothing and boots.

呼吸系统的防护:

Respiratory protection:

在通风不良的环境下,工作人员应配备合适的呼吸装置。

In case of insufficient ventilation, wear suitable respiratory equipment.

9. 物理和化学特性

Physical and chemical properties

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No: 01051900000990 (E)

Date: 2019-03-06

Page: 8 of 12



Appearance and Odor 外观和气味	Rectangle Solid Black and Odorlessness 长方型固体, 黑色, 无臭		
Boiling Point 沸点	Not applicable 不适用	Specific Gravity(H2O=1) 比重	Not applicable
Melting Point 熔点	Not applicable 不适用	Vapor Pressure(mm Hg) 蒸汽压	Not applicable
Solubility in water 水溶性	100%(Sulfuric Acid)	Vapor density(Air =1) 蒸汽密度	3.4(Electrolyte)
Evaporation rate 蒸发率	Not applicable 不适用	Volatile by weight 挥发性	Not applicable
Upper explosive limit(%) 爆炸极限	Not applicable 不适用	Decomposition temp(F) 分解温度	Not applicable



10. 稳定性和反应活性 Stability and reactivity

反应性:

Reactivity:

不具备反应性

Not reactive

化学稳定性:

Chemical stability:

在常温常压条件下保持稳态

Stable under normal temperatures and pressures

危险应的可能性

Possibility of hazardous reactions

不会发生危害性聚合反应。

Hazardous polymerization will not occur.

应避免的条件:

Conditions to avoid:

持久性充电, 火源。

Prolonged overcharge, sources of ignition.

不相容材料:

铅化合物: 应避免与强碱、酸、易燃性有机材料、卤化物、硝酸钾、高锰酸、过氧化物、初生态氧、还原剂和水接触。

Incompatible materials:

Lead compounds: Avoid contact with strong bases, acids, combustible organic materials, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, reducing agents and water.

危害性分解产物:

当铅化合物暴露于高温环境时, 有可能产生有毒金属烟雾、气体或灰尘; 与强酸、碱或者初生态氢接触, 可产生剧毒性三氢化砷气体。

Hazardous decomposition products:

Lead compounds exposed to high temperatures will likely produce toxic metal fume, vapor or dust; contact with strong acid/base or presence of nascent hydrogen may generate highly toxic arsine gas.

11. 毒理学资料 Toxicological information



Lead: The toxic effects of lead are accumulative and slow to appear. It affects the kidneys, reproductive and central nervous system. The symptoms of lead overexposure are anemia, vomiting, headache stomach pain, dizziness, loss of appetite and muscle and joint pain. Exposure to lead from a battery most often occurs during lead reclaim operations through the breathing or ingestion of lead dusts and fumes.

铅: 铅的毒性作用是累积的, 且缓慢出现。影响肾脏, 生殖以及中枢神经系统。铅过度接触的症状是贫血、呕吐、头痛。胃痛, 头晕, 食欲不振, 肌肉和关节疼痛。接触电池中的铅通常发生在铅回收操作中, 通过呼吸或吸入铅尘和烟雾。

12. 生态学资料 Ecological information

When promptly used or disposed the battery does not present environmental hazard. When disposed, keep I away from water, rain and snow.

电池在及时使用或处置时, 不存在环境危害。处理后, 请远离水、雨和雪。

13. 废弃处置 Disposal consideration

处置说明:

Disposal instructions:

废电池: 送二次铅冶炼厂回收。将中和后的泥浆放入密封容器中, 并根据州和联邦法规进行处理。在中和和测试后, 应按照经批准的地方、州和联邦要求管理大型水稀释溢出物。咨询州环保局和/或联邦环保局

Spent batteries: Send to secondary lead smelter for recycling.

Place neutralized slurry into sealed containers and handle as applicable with state and federal regulations.

Large water-diluted spills, after neutralization and testing, should be managed in accordance with approved local, state and federal requirements. Consult state environmental agency and /or federal EPA

14. 运输信息 Transport information

对于铅酸电池的国际运输, 应遵守以下条令: 国际海运组织 (IMO) 颁布的国际海运危险货物 (IMDG) 规则, 国际航空运输协会 (IATA) 颁布的《危险货物条例 (DGR)》, 以及国际民航组织 (ICAO) 颁布的《危险物品航空安全运输的技术细则》。这些法律条令均基于联合国颁布的《关于危险货物运输的建议书•规章范本》。

联合国分类: UN2800; 合适的运输名称: 蓄电池; 分类: 第8类; 包装要求: P801

铅酸电池若符合联合国《关于危险货物运输的建议书•规章范本》第3.3章特殊规定238条的要求, 其可作为非限制性货物进行空运和海运。否则, 应依照分类8危险货物之规定实施运输。



For the international transport of lead-acid batteries, the following regulations should be observed: International Maritime Organization (IMO) promulgated International Maritime Dangerous Goods (IMDG) Rules, International Air Transport Association (IATA) promulgated Dangerous Goods Regulations (DGR), and International Civil Aviation Organization (ICAO) promulgated Technical Rules for the Safe Transport of Dangerous Goods by Air. These laws and regulations are based on the Model Regulations on the Transport of Dangerous Goods promulgated by the United Nations.
United Nations Classification: UN2800; Appropriate shipping name: Battery; Classification: Category 8; Packaging requirements: P801
Lead-acid batteries can be transported by air and sea as non-restricted goods if they meet the requirements of Section 238 of Chapter 3.3 of the United Nations Recommendations on the Transport of Dangerous Goods Model Regulations. Otherwise, transportation shall be carried out in accordance with the provisions of Classification 8 Dangerous Goods.

15. 法规信息 Regulation information

法律信息

Law information

- 《危险物品规则》
- 《Dangerous Goods Regulations》
- 《对危险货物运输的有关规定的建议》
- 《Recommendations on the Transport of Dangerous Goods Model Regulations》
- 《国际海运危险货物规则》
- 《International Maritime Dangerous Goods》
- 《危险品安全运输技术指令》
- 《Technical Instructions for the Safe Transport of Dangerous Goods》
- 《危险货物分类和品名编号》
- 《Classification and code of dangerous goods》
- 《职业安全卫生法》
- 《Occupational Safety and Health Act》(OSHA)
- 《有毒物质控制法》
- 《Toxic Substance Control Act》(TSCA)
- 《消费产品安全法》
- 《Consumer Product Safety Act》(CPSA)
- 《联邦环境污染控制法》
- 《Federal Environmental Pollution Control Act》(FEPCA)
- 《石油污染法案》
- 《The Oil Pollution Act》(OPA)
- 《超级基金修正案和再授权法案III(302/311/312/313)》
- 《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》(SARA)
- 《资源保护及恢复法案》
- 《Resource Conservation and Recovery Act》(RCRA)
- 《安全饮用水法》
- 《Safety Drinking Water Act》(CWA)
- 《加州 65 提案》
- 《California Proposition 65》



《美国联邦法规》

《Code of Federal Regulations》(CFR)

根据所有联邦、州和地方法律。

In accordance with all Federal, State and local laws.

16. 其他信息 Other information

本文件仅对由委托方（英德奥克莱电源有限公司）提供的，并由英德奥克莱电源有限公司生产的电池（N150）有效。该电池的成分信息由委托方提供并承诺其完整性和准确性。用户应仔细阅读此文件，并按照正确的方法使用电池，如因电池使用不当造成的损害或损失，广东检验检疫技术中心（IQTC）不承担任何责任。

This file is only effective to the batteries (N150) provided by commissioner (YINGDE AOKLY POWER CO, LTD), which manufactured by YINGDE AOKLY POWER CO, LTD The commissioner provides the composition information of batteries, and promises its integrity and accuracy.

Users should read this file carefully, and use the batteries in correct method. Guangdong Inspection Quarantine Technology Center (IQTC) doesn't assume responsibility for any damage or loss because of misuse of batteries.