



MSDS

材料安全数据表

MATERIAL SAFETY DATA SHEET

Prepared For : TEAM WAY INTERNATIONAL INDUSTRY LIMITED
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Section 1-Chemical Product and Company Identification

第一部分-化学品及企业标识

Product Name 产品名称	Sealed Lead Acid Battery 铅酸蓄电池
Model 型号	/
Ratings 额定参数	/
Weight 重量	/
Manufacturer 制造商	FUJIAN HUAXIANG POWER TECHNOLOGY CO., LTD. 福建华祥电源科技有限公司
Manufacturer Address 制造商地址	No.1, Huaxiang Road, Xingtai Industrial Zone, Changtai County, Zhangzhou, Fujian 福建省漳州市长泰县兴泰工业区华祥路 1 号
Emergency Telephone 应急电话	+86 13599288591
Fax 传真	/

Section 2- Composition Information

第二部分-成分信息

Chemical Composition 化学成分	Chemical Formula 化学式	CAS No. CAS号	Weight (%) 重量含量 (%)
ABS plastic for battery shell ABS塑料池壳	/	9003-56-9	9.6
Lead 铅	Pb	7429-90-5	61.7
AGM fiberglass separator paper AGM玻璃纤维隔板纸	/	/	0.3
Acid 硫酸	H ₂ SO ₄	7664-93-9	27.6
Epoxy resin adhesive 环氧树脂胶	/	/	0.7

Section 3- Hazards Identification

第三部分-危险性概述

Emergency overview 紧急情况概述	N/A 不适用
Classification according to GHS GHS分类	Not a dangerous substance according to GHS 不属于GHS危险物品



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Label elements: 标签元素	
Hazard pictogram(s) 危险标签图	No available 不适用
Signal word 提示语	Do not touch battery internal substance. 不要接触电池内部物质。
Hazard statement(s) 危险声明	Fire or explosion may occur at high temperature or short circuit. 在高温或短路时可能发生火灾或爆炸。
Precautionary statement(s): 预防声明	
Prevention 预防	No available 不适用
Response 反应	Valve-controlled aluminic acid batteries are not dangerous when following manufacturer's instructions under normal conditions. If abused, there is the risk of rupture, fire, leakage of internal components, which may cause casualties, contact with internal components can cause eye and skin irritation or burns, but not limited to the following circumstances: old time aging, short circuit, into the fire, because of hard objects punctured. 阀控铝酸电池没有危险时,按照正常情况下制造商的指示。如果滥用,有破裂,火灾风险,内部元件的泄露,可能造成人员伤亡,接触内部的元件会引起眼睛和皮肤的刺激或灼伤,但不限于以下情况:老时间老化,短路,投入火,因为硬物刺破。
Disposal 处理	Damaged batteries should be placed in sealed plastic bags or containers. 损坏的电池应放在密封的塑料袋或容器。
Environmental hazards: 环境危害	The substance inside the battery can cause harm to the environment. 电池内部物质会对环境造成危害
Important symptoms: 重要症状	No relevant information 没有相关资料
Section 4- First Aid Measures 第四部分-急救措施	
Eye contact 眼睛接触	Rinse eyes with plenty of water in case of contact with electrolytes. 在接触的电解质的情况下用大量水冲洗眼睛。
Skin contact 皮肤接触	If the battery's internal material comes into contact with the skin, rinse immediately with plenty of water for at least 15 minutes. Seek medical attention immediately. 如果电池的内部材料与皮肤接触,立即冲洗用大量的水至少15分钟。立即就医。
Inhalation 吸入	Remove from exposure and move to fresh air immediately. Use oxygen if available. 立即从暴露处移至空气清新处,如果呼吸困难给予输氧,立即就医。
Ingestion 摄入	If ingestion of battery materials, do not easily induce vomiting, seek medical advice immediately. 如果食入电池内部材料,不要轻易催吐,要立即就医。
Section 5- Fire Fighting Measures 第五部分-消防措施	



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Damage characteristics 危害特点	Toxic gases, or vapors, may be produced in combustion. 有毒气体, 或蒸汽可能在燃烧中产生。
Extinguishing Media 灭火介质	Carbon dioxide, dry powder or suitable foam. 二氧化碳, 干粉或适当泡沫。
Special Fire-Fighting Procedures 特殊灭火程序	Fire fighting personnel must wear filter type gas mask and full body fireproof gas protective clothing and put out the fire upwind. 消防人员必须佩带过滤式防毒面具、穿全身防火防毒服, 在上风向灭火。
Hazardous Combustion Products 燃烧产生的危险物品	Carbon dioxide, acids, hydrogen and oxygen. 二氧化碳, 酸, 氢气和氧气。

Section 6- Accidental Release Measures

第六部分-泄露应急处理

Personal precautions, protective equipment and emergency procedures:

If there is a battery leak, avoid skin or eye contact with the leaking battery interior material, using rubber gloves, sand, soil or other inert materials. The contaminated area should be ventilated. Damaged batteries should be placed in sealed plastic bags or containers.

个人预防措施、保护设备和应急程序:

如果电池出现泄漏, 避免皮肤或眼睛接触泄漏的电池内部材料, 使用橡胶手套、砂、土或其他惰性物质。污染区域应通风。损坏的电池应放在密封的塑料袋或容器。

Environment precautions:

Do not allow product to reach sewage system or any water source.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

环境预防措施:

不允许产品到达排水系统或任何水源。
如果渗透进排水系统或任何水源, 通知相应的部门。
不允许进入下水道/表面或地下水。

Methods and material for containment and cleaning up:

Collect all the materials and put them into a plastic container. Dispose according to local laws and regulations, avoid entering the land, sewer or water.

抑制和清理材料的方法:

收集所有材料放进一个塑料容器。根据当地的法律法规来处置, 避免可溶物质进入大地、下水道或水源。

Section 7- Handling and Storage

第七部分-操作处置和储存

Handling 操作处置	Stay away from fire, heat and flames. The battery must be internally packaged to prevent short circuits and to prevent movement leading to short circuits, to avoid mechanical or electrical damage and overcharging, and must be treated with acid-resistant gloves for all battery components. Avoid skin, eye contact and inhalation. Do not smoke in the workplace. Avoid combustible and corrosive materials. 远离火源、热源和火焰。电池必须有内部包装防止短路和防止移动导致短路,
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	避免机械或电气损害和过充，必须使用耐酸手套来处理所有的电池组件。避免皮肤、眼睛接触，避免吸入。在工作地点不吸烟。避免可燃物和腐蚀剂。
Storage 储存	A cool, well-ventilated area. Stay away from fire, heat and flames. Batteries must be packed in an internal package to effectively prevent short circuit and prevent short circuit movement leading to short circuit. Substances to be avoided: strong oxidizer, flammable and corrosive. 阴凉、通风良好的区域。远离火源、热源和火焰。电池必须用内部包装来包装，以有效防止短路和短路防止运动导致短路。避免的物质：强氧化剂，可燃物和腐蚀剂。
Other Precautions 其他要注意的防范措施	No available 不适用

Section 8- Exposure Controls/Personal Protection 第八部分-接触控制和个体防护

Engineering Controls 设计控制	Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor. Keep away from heat and open flame. Store in a cool, dry place. 设计局部排气通风或其它设计来控制粉尘、雾、烟雾和气体。
Personal Protective Equipment 个人防护装备	Respiratory protection: wear self-inhaling filter dust respirator when it may come into contact with leaking products. Skin and body protection: breath-through gas suits. Hand protection: wear chemical safety glasses. Eye protection: wear chemical protective glasses. 呼吸防护：可能接触泄露的产品时，佩戴自吸过滤式防尘口罩。 皮肤和身体防护：穿透气型防毒服。 手防护：戴化学品安全防护眼镜。 眼睛保护：戴上化学品防护眼镜。
Other Protective Equipment 其它防护装备	Have a safety shower and eye wash fountain readily available in the immediate work area. 在工作区域应该有一个立即可以使用的安全淋浴和喷水洗眼器。
Hygiene Measures 卫生措施	Do not eat, drink, or smoke in work area. Maintain good housekeeping. 在工作区域不得进食，饮水或吸烟。

Section 9- Physical and Chemical Properties 第九部分-物理和化学特性

Appearance and Odor 外观和气味	The entire battery is a solid article consisting of an opaque plastic case with two protruding lead terminals or tin-plated brass terminals. The battery is odorless. Sulfuric Acid is a liquid.
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	整个电池由一个不透明的塑料外壳组成，外壳上有两个突出的铅端子或镀锡黄铜端子。电池没有气味。硫酸是一种液体。
Specific Gravity (H₂O=1) : 比重(水= 1):	Electroyte 1.300
pH 酸碱度	No available 不适用
Melting point/freezing point 熔点/凝固点	No available 不适用
Boiling Point and Boiling range 沸点、沸点范围:	Electroyte 110°C ~ 112°C
Flash Point 易燃度	No available 不适用
Upper/lower flammability or explosive limits 自燃或爆炸的上、下极限	No available 不适用
Vapor Pressure 蒸汽压	Electroyte 11.7mm Hg at 20°C
Vapor Density 蒸汽密度	No available 不适用
Relative density (AIR=1) 相对密度 (空气=1)	Electroyte 3 4
Solubility in Water 水溶性	Lead, lead Oxide and Lead Sulfate are insoluble in water. Sulfurie Acid is 100%Soluble in Water. 铅、氧化铅和硫酸铅不溶于水。硫酸百分之百溶于水。
Auto-ignition temperature 自燃温度	No available 不适用
Decomposition temperature 分解温度	No available 不适用
Evaporation rate 蒸发速率	No available 不适用
Flammability (soil, gas) 易燃性(土壤、天然气)	No available 不适用
Viscosity 粘性	No available 不适用
Other information 其它信息	No available 不适用
Section 10- Stability and reactivity 第十部分 稳定性和反应活性	
Stability 稳定性	The product is stable under conditions described Section 7 产品在第七部分所诉的条件下稳定
Conditions to Avoid 应避免的条件	Heating, open flame, short circuit and water. 加热、明火、短路和水



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Incompatible Materials 不兼容的材料	Acid、Sulfur、 strong oxidizer 酸、硫、强氧化剂
Hazardous Decomposition Products 危险分解物	Sulfuric acid mist, metal oxide, oxygen, hydrogen 硫酸雾、金属氧化物、氧气、氢气
Possibility of Hazardous Reaction 危险反应的可能性	Not Available 不适用

Section 11 – Toxicological Information 第十一部分-毒理学资料

Irritation 刺激	No relevant data 无相关资料
Sensitization 致过敏	Not Available 不适用
Neurological Effects 影响神经系统	Not Available 不适用
Teratogenicity 致畸	Not Available 不适用
Reproductive Toxicity 再生毒性	Not Available 不适用
Mutagenicity (Genetic Effects) 诱变(遗传效应)	Not Available 不适用
Toxicologically Synergistic Materials 附带材料毒性	Not Available 不适用

Section 12- Ecological Information 第十二部分-生态学资料

Ecological Toxicity 生态毒性	Not Available 不适用
Mobility in soil 在土壤中的流动性	Not Available 不适用
Persistence and Degradability 持久性和分解性	Not Available 不适用
Bioaccumulation potential 生物聚积	Not Available 不适用
Other Adverse Effects 其他不利影响	Internal electrolytes may cause adverse environmental effects. 内部电解液可能会造成不利的环境影响。



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Section 13- Disposal Considerations

第十三部分-废弃处置

Product disposal recommendation 产品废弃处理建议	Observe local, state and federal laws and regulations. Discarded batteries cannot be treated as ordinary waste. Do not put it in the fire or at high temperature. Do not dissect, puncture, crush or otherwise treat. The best way is recycling. 遵守当地、州和联邦法律和法规。废弃的电池不能被当作普通垃圾。不能投入火中或置于高温。不能解剖、刺穿、粉碎或类似处理。最好的办法是回收。
Packaging disposal recommendation 包装处理建议	Disposal must be made according to official regulations. 废弃处理必须根据当地法规。

Section 14 – Transport Information

第十四部分-运输信息

Label for conveyance 运输标签	
Land Transport	Land Transport(ARD/RID) <ul style="list-style-type: none">▪ UN No.: UN2800▪ Classification ARD/ RID: Class 8▪ Proper Shipping Name: BATTERIES, WET, NON-SPILLABLE electric storage▪ Packing Group ARD: Not assigned▪ Tunnel code: E▪ ARD/ RID: New and spent(used) batteries are exempt from all ARD/ RID(special provision 598)
Sea Transport	Sea Transport(IMDG Code) <ul style="list-style-type: none">▪ UN No.: UN2800▪ Classification ARD/ RID: Class 8▪ Proper Shipping Name: BATTERIES, WET, NON-SPILLABLE electric storage▪ EmS: F-A, S-B Non-spillable batteries meet the requirements of Special Provision 238; they are exempt from all IMDG codes and are not subject to special regulation for sea transport. <ul style="list-style-type: none">▪ Marine pollutant: No



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Air Transport	Air Transport(IATA DGR) <ul style="list-style-type: none">▪ UN No.: UN2800▪ Classification ARD/ RID: Class 8▪ Proper Shipping Name: BATTERIES, WET, NON-SPILLABLE electric storage▪ <u>Special Provision A48</u>: Packing test arenot considered necessary▪ <u>Special Provision A67</u>: Yuasa's VRLA batteries meet the requirements of Packing Instruction 872. The battery has been prepared for transport so as to prevent: <ul style="list-style-type: none">a) A short-circuit of the battery's terminals by packaging in a strong and sturdy carton box; AND/ORb) The battery has been fitted with an insulating cover(made from ABS) which prevents contact with the terminals.c) Unintentional activation is thus prevented The words "NOT RESTRICTED" and the Special Provision(SP) number must be indicated on all shipping documents.
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Transport information:

They should be secured in strong packing during transportation to ensure that goods do not tilt, fall or break, and to prevent them from collapsing and becoming wet with rain.

Mode of transport: air, sea, railway, road.

运输信息:

他们应该在运输期间用坚固的包装来固定，确保货物不会倾斜，掉落和破损，防止货物倒塌和被雨水浸湿。

运输方式：空运，海运，铁路，公路。

Section 15- Regulatory information

第十五部分 法规信息

Law information

法律信息

《Dangerous Goods Regulations》

《危险物品规则》

《Recommendation 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》

《国际海运危险货物规则》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《危险品安全运输技术指令》

《Classification and code of dangerous Goods》

《危险货物分类和品名编号》

《Occupational Safety and Health Act》 (OSHA)

《职业安全卫生法》

《Toxic Substance Control Act》 (TSCA)

《有毒物质控制法》

《Consumer Product Safety Act》 (CPSA)

《消费产品安全法》

《Federal Environmental Pollution Control Act》 (FEPCA)

《联邦环境污染控制法》

《The Oil Pollution Act》 (OPA)



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《石油污染控制法》
《Superfund Amendments and Reauthorization Act TitleIII (302/311/312/313)》(SARA)
《超级基金修正案和再授权法案III(302/311/312/313)》
《Resource Conservation and Recovery Act》(RCRA)
《资源保护及恢复法案》
《Safety Drinking Water Act》(CWA)
《安全饮用水法》
《California Proposition 65》
《加州65提案》
《Code of Federal Regulations》(CFR)
《美国联邦法规》

In according with all Federal, State and local laws.
根据所有联邦、州和地方法律。

Section 16- Other Information

第十六部分-其它信息

The information above is believed to be accurate and represents the best information currently available to us. However, TEAM WAY makes 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 investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

上面的信息被认为是准确代表了目前最好的信息提供给我们。然而,天威没有对商品性能保证或任何其他保证,包括明示或暗示,对这类信息的使用我们不承担责任。用户应作出自己的调查,以确定是否适合其特定用途的信息。虽然在此处所包含的数据的准备已经采取了合理的预防措施,这是仅为你提供的信息、考虑和调查。这个化学品安全技术说明书为本产品提供了安全操作指南和使用指南,它并不能对所有可能发生的情况提供建议,因此,您特殊使用该产品应先进行评估,以确定是否需要额外的预防措施。

-- End of Report --

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