

# MSDS Report

## MATERIAL SAFETY DATA SHEET

### 材料安全数据报告

**Name of Sample** : 密封铅酸蓄电池  
**产品名称** : **LEAD-ACID BATTERY**  
**Model** : **6-DFM-12.0 (12V12A), 请参阅第2页**  
**型号** : **6-DFM-12.0 (12V12A), Reference to page 2**  
**Trade Name** : **N/A**  
**商标**  
**Applicant** : 广州市鑫汤浅电源有限公司  
**申请商** : **Guangzhou Xintang shallow Power Supply Co., LTD**  
**Address** : 广州市白云区社前路18号1栋1层E105铺  
**地址** : **Shop E105, Floor 1, Building 1, No.18 Sheqian Road, Baiyun District, Guangzhou City, Guangdong Province, China.**  
**Report No.** : **HSO251216111VRM**  
**报告编号**  
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Prepared and checked by



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**The MSDS was prepared by : Shenzhen HSO. Test Technology Co., Ltd.**

**MSDS编写: 深圳华晟欧测试技术有限公司**

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**深圳市宝安区福海街道桥头社区桥南新区15栋311**



## Section 1 - Chemical Product and Company Identification/ 1-化学品名称和制造商信息

**Applicant** : 广州市鑫汤浅电源有限公司  
**申请商** : Guangzhou Xintang shallow Power Supply Co., LTD  
**Address** : 广州市白云区社前路 18 号 1 栋 1 层 E105 铺  
**地址** : Shop E105, Floor 1, Building 1, No.18 Sheqian Road, Baiyun District, Guangzhou City, Guangdong Province, China.  
**Manufacturer** : 江西天则电源有限公司  
**制造商** : Jiangxi tianze power supply co., ltd  
**Address** : 江西省宜春市上高县沙基路 10 号  
**地址** : No.10 Shaji Road, shanggao county, Yichun City, Jiangxi Province ,China.  
**Product name** : 密封铅酸蓄电池  
**产品名称** : SEALED-LEAD-ACID BATTERY  
**Model** : 6-DFM-12.0(12V12A), 6V5AH, 4V4AH, 4V5AH, 6V1.3AH, 6V2.3AH, 6V4AH, 6V4.5AH, 6V7AH, 6V8AH, 6V10AH, 6V12AH, 12V1.3AH, 12V2.2AH, 12V3.3AH, 12V4AH, 12V4.5AH, 12V5AH, 12V7AH, 12V8AH, 12V9AH, 12V10AH, , 12V14AH, 12V17AH, 12V18AH, 12V20AH, 12V24AH, 12V28A, 12V33A, 12V38A, 12V50A, 12V55AH, 12V65AH, 12V70AH, 12V75AH, 12V80AH, 12V90AH, 12V100AH, 12V120AH, 12V150AH, 12V180AH, 12V200AH, 12V250AH, 24V2AH, 24V5AH, 24V6AH, 24V12AH,  
**型号** :  
**Ratings/参数** : 12V, 12Ah,  
**TEL/电话** : +86-795-2499931  
**Fax/传真** : +86-795-2499931  
**E-mail/邮箱** : gs@gs-batteries.com

**紧急联络人及号码 Emergency contact person and number:**

**鑫汤浅 Tangqian Xin. +86-795-2499931**

## Section 2 – Composition/Information on Ingredient 2-成分组成/信息

| Chemical Composition | CAS No.   | Weight (%) |
|----------------------|-----------|------------|
| 化学成分                 | CAS 编号    | 百分比        |
| Lead                 | 7439-92-1 | 63%-72%    |

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|                                                                                                                                |            |           |
|--------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| Dilute sulphuric acid                                                                                                          | 7664-93-9  | 21%-28%   |
| ABS shell                                                                                                                      | 9003-56-9  | 5%-6.2%   |
| AGM separator                                                                                                                  | 65997-17-3 | 1.2%-2.3% |
| “ * ” The exact percentage (concentration) of composition has been withheld as a trade secret.<br>“ * ” 组成的确切百分比（浓度）已被保留为商业秘密。 |            |           |

## Section 3 - Hazards Identification/3-危害识别

|                                              |                                                             |
|----------------------------------------------|-------------------------------------------------------------|
| 紧急情况概述: 45<br>Emergency overview:45          | 无<br>N/A                                                    |
| 根据 GHS 分类<br>Classification according to GHS | 根据 GHS 不是危险物质<br>Not a dangerous substance according to GHS |
| Label elements/标签元素:                         |                                                             |
| 危险象形图/Hazard pictogram(s)                    | 无法使用/Not Available                                          |
| 信号词/Signal word                              | 无法使用/Not Available                                          |
| 信号词/Hazard statement(s)                      | 无法使用/Not Available                                          |
| Precautionary statement(s)/防范说明:             |                                                             |
| Prevention/预防                                | 无法使用/Not Available                                          |
| Response/响应                                  | 无法使用/Not Available                                          |
| Disposal/处置方式                                | 无法使用/Not Available                                          |
| Environmental hazards/环境危害:                  | 暂无相关信息/No relevant information                              |
| Important symptoms/重要症状:                     | 有关更多信息, 请参见第 11 节。/See section 11 for more information      |

## Section 4 - First Aid Measures /4-急救措施

|                   |                                                                                                                                                                 |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye contact/眼睛接触  | 用大量水冲洗眼睛至少 15 分钟, 不时提起上下眼睑。 获得医疗援助。<br>Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. |
| Skin contact/皮肤接触 | 脱掉被污染的衣服, 并用大量水或淋浴冲洗皮肤 15 分钟。获得医疗援助。<br>Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.              |
| Inhalation/吸入     | 从暴露处移开并立即移至新鲜空气中。如果可用, 请使用氧气。                                                                                                                                   |



|              |                                                                                                                                                 |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|              | Remove from exposure and move to fresh air immediately. Use oxygen if available.                                                                |
| Ingestion/摄取 | 至少喝 2 杯牛奶或水,引起呕吐,除非患者失去知觉。打电话给医生。<br>Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician. |

## Section 5 - Fire Fighting Measures/5-消防措施

|                                                  |                                                                                                      |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Flash Point/闪点                                   | 无/N/A                                                                                                |
| Auto-Ignition Temperature/自燃点                    | 无/N/A                                                                                                |
| Extinguishing Media/灭火剂                          | H2O, CO2                                                                                             |
| Special Fire-Fighting Procedures/<br>特殊的灭火程序     | 自给式呼吸器<br>Self-contained breathing apparatus                                                         |
| Unusual Fire and Explosion<br>Hazards/异常的火灾和爆炸危险 | 当电池暴露于过多的热量中时,电池可能会排气<br>Cell may vent when subjected to excessive heat-exposing<br>battery contents |
| Hazardous Combustion<br>Products/有害燃烧产物          | 一氧化碳,二氧化碳,氧化锂烟雾。<br>Carbon monoxide, carbon dioxide, lithium oxide fumes.                            |

## Section 6-Accidental Release Measures/6-意外泄漏措施

个人预防措施,防护装备和应急程序:

**Personal precautions, protective equipment and emergency procedures:**

如果释放了电池,请从现场移开人员,直到烟雾消散。提供最大的通风以清除有害气体。首选的响应是离开该区域并允许蒸气消散。避免皮肤和眼睛接触或吸入蒸气。用吸收剂清除溢出的液体并焚化。如果发生电池泄漏,液体可能会被沙子,泥土或其他惰性物质吸收,同时污染区域应通风。

If the battery 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 vapors to dissipate. Avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the battery happens, liquid could be absorbed with sand, earth or other inert substance and contaminated area should be ventilated meantime.

环境注意事项:

**Environment precautions:**

禁止产品进入污水系统或任何水源。

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如果渗入水道或污水系统, 请通知有关当局。

禁止进入下水道/地表或地下水。

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.

围堵和清理的方法和材料:

**Methods and material for containment and cleaning up:**

如果拆除电池外壳, 则少量电解液可能会泄漏。 将所有释放的材料收集在衬有塑料的容器中。 根据当地法律法规进行处置。 避免浸出的物质进入地下, 渠化或浇水。

If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose off according to the local law and rules. Avoid leached substances to get into the earth, canalization or waters.

## Section 7. Handling and storage/7-处理和储存

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling/处理方式</b>            | <p>请勿打开, 破坏或焚烧电池, 因为它们可能会泄漏或破裂并释放到密封容器中的成分释放到环境中。</p> <p>请勿使端子短路或对电池过度充电 过度放电, 着火。</p> <p>请勿挤压或刺穿电池或将其浸入液体中。</p> <p>The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.</p> <p>Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.</p> |
| <b>Storage/存储</b>               | <p>避免机械或电气滥用。最好存放在温度变化很小的阴凉, 干燥和通风的地方。 应避免在高温下存放。</p> <p>存放不要将电池放在加热设备附近, 也不要长时间暴露在直射的阳光下。</p> <p>Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided.</p> <p>Storage Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.</p>                                                                                |
| <b>Other Precautions/其他注意事项</b> | <p>如果拆卸, 压碎或暴露于火或高温下, 电池可能会爆炸或引起灼伤。 请勿短路或极性错误安装。 The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.</p>                                                                                                                                                                                                                                                                                |



## Section 8 - Exposure Controls, Personal Protection and labeling/8-接触控制，个人防护和标签

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Engineering Controls/工程控制:</b>             | 使用局部排气通风或其他工程控制措施来控制灰尘，薄雾，烟气和蒸气的来源。远离热源和明火。储存在阴凉，干燥的地方。<br>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.                                                                                                                                                                                                                                                                                     |
| <b>Personal Protective Equipments/个人防护装备:</b> | 呼吸系统防护：在正常情况下不需要。皮肤和身体防护：在正常情况下是不必要的，如果处理打开或泄漏的电池，请穿戴合适的防护服和手套。个人防护<br>Respiratory Protection: Not necessary under normal conditions.<br>Skin and body Protection: Not necessary under normal conditions, Wear suitable protective clothing and gloves if handling an open or leaking battery. Personal Protective Equipment Hand protection: Wear suitable gloves if handling an open or leaking battery.Eye Protection: Not necessary under normal conditions, Wear safety glasses if handling an open or leaking battery. |
| <b>Other Protective Equipment/其他防护装备:</b>     | Have a safety shower and eye wash fountain readily available in the immediate work area.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Hygiene Measures卫生措施:</b>                  | Do not eat, drink, or smoke in work area. Maintain good housekeeping.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Section 9 - Physical and Chemical Properties/ 9-物理和化学性质

|                                              |                   |
|----------------------------------------------|-------------------|
| <b>Form/形成</b>                               | 固体/Solid          |
| <b>Color/颜色</b>                              | 黑色/Black          |
| <b>Odour/气味</b>                              | 不可用/Not Available |
| <b>Ph/pH 值</b>                               | 不可用/Not Available |
| <b>Melting point/freezing point/熔点/凝固点</b>   | 不可用/Not Available |
| <b>Boiling Point and Boiling range/沸点和沸程</b> | 不可用/Not Available |



|                                                          |                   |
|----------------------------------------------------------|-------------------|
| Flash Point/闪点                                           | 不可用/Not Available |
| Upper/lower flammability or explosive limits/上/下可燃性或爆炸极限 | 不可用/Not Available |
| Vapor Pressure/蒸汽压力                                      | 不可用/Not Available |
| Vapor Density/蒸气密度                                       | 不可用/Not Available |
| Relative density/相对密度                                    | 不可用/Not Available |
| Solubility in Water/水中溶解度                                | 不可用/Not Available |
| Auto-ignition temperature/自燃温度                           | 不可用/Not Available |
| Decomposition temperature/分解温度                           | 不可用/Not Available |
| Evaporation rate/蒸发率                                     | 不可用/Not Available |
| Flammability (soil, gas)/易燃性（土壤，气体）                      | 不可用/Not Available |
| Viscosity/黏度                                             | 不可用/Not Available |

## Section 10 - Stability and Reactivity/ 10-稳定性和反应性

|                                            |                                                                                                                                                                                                     |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stability/稳定性                              | 产品在第7节所述的条件下稳定<br>The product is stable under conditions described Section 7                                                                                                                        |
| Conditions to Avoid/应避免的条件                 | 加热至70° C以上或焚化。 变形，残缺，挤压，分解，过度充电，短路，长时间暴露在潮湿的环境中。<br>Heat above 70° C or incinerate. Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. |
| Incompatible Materials/不兼容的材料              | 氧化剂，酸，碱。<br>Oxidizing agents, acid, base.                                                                                                                                                           |
| Hazardous Decomposition Products/危险分解产物    | 一氧化碳，二氧化碳，氧化锂烟雾。<br>Carbon monoxide, carbon dioxide, lithium oxide fumes.                                                                                                                           |
| Possibility of Hazardous Reaction/危险反应的可能性 | 不可用/Not Available                                                                                                                                                                                   |



## Section 11 - Toxicological Information/ 11-毒理学信息

|                                                      |                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Irritation/刺激作用</b>                               | 仅当电池被机械，热或电滥用到危及外壳的程度时，才会发生刺激的危险。如果发生这种情况，可能会刺激皮肤，眼睛和呼吸道。<br>Risk of irritation occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs,irritation to the skin, eyes and respiratory tract may occur. |
| <b>Sensitization/敏化作用</b>                            | 不可用/Not Available                                                                                                                                                                                                                                                                  |
| <b>Neurological Effects/神经学作用</b>                    | 不可用/Not Available                                                                                                                                                                                                                                                                  |
| <b>Teratogenicity/致畸性</b>                            | 不可用/Not Available                                                                                                                                                                                                                                                                  |
| <b>Reproductive Toxicity/生殖毒性</b>                    | 不可用/Not Available                                                                                                                                                                                                                                                                  |
| <b>Mutagenicity (Genetic Effects)/致突变性（遗传效应）</b>     | 不可用/Not Available                                                                                                                                                                                                                                                                  |
| <b>Toxicologically Synergistic Materials/毒理学协同材料</b> | 不可用/Not Available                                                                                                                                                                                                                                                                  |

## Section 12 - Ecological Information/12-生态信息

|                                              |                   |
|----------------------------------------------|-------------------|
| <b>Ecological Toxicity/生态毒性</b>              | 不可用/Not Available |
| <b>Mobility in soil/土壤中的流动性</b>              | 不可用/Not Available |
| <b>Persistence and Degradability/持久性和降解性</b> | 不可用/Not Available |
| <b>Bioaccumulation potential/生物蓄积潜力</b>      | 不可用/Not Available |
| <b>Other Adverse Effects/其他不良影响</b>          | 不可用/Not Available |

## Section 13 - Disposal Considerations/ 13-处置注意事项

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|                                                    |                                                                          |
|----------------------------------------------------|--------------------------------------------------------------------------|
| <b>Product disposal recommendation/产品处置建议</b>      | 遵守当地，州和联邦法律法规。<br>Observe local, state and federal laws and regulations. |
| <b>Uncleaned packaging recommendation/未清洁的包装建议</b> | 必须按照官方规定进行处置。<br>Disposal must be made according to official regulations |

## Section 14 - Transport Information/14-运输信息

|                                           |                                           |
|-------------------------------------------|-------------------------------------------|
| <b>Label for conveyance/运输标签</b>          | 无/N/A                                     |
| <b>Packing group/包装组</b>                  | --                                        |
| <b>Marine pollutant/海洋污染物</b>             | 否/No                                      |
| <b>UN Proper shipping name/联合国适当的运输名称</b> | 湿电池 不可溢出<br>Wet Batteries , non-spillable |
| <b>UN Identification/联合国的识别</b>           | UN2800                                    |

### Transport information/运输信息:

该货物应视为非限制货物，并且必须符合 IATA 第 67DGR 手册的特殊规定 A67 的包装说明 872 或 IMDG CODE（修订 42-24）的特殊规定 238 的要求。

在说明中必须包括“不受限制”字样和特殊规定编号。 航空或海上运单上的实质内容。

运输方式：空运，海运，铁路，公路。

This goods shall be considered Not Restricted Goods and need to be complied with the requirements of Packing Instruction 872 of special provision A67 of 67<sup>th</sup> DGR Manual of IATA or special provision 238 of IMDG CODE (Amdt. 42-24).

The words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air or Sea Waybill.

**Transport Fashion:** By air, by sea, by railway, by road.

## Section 15 - Regulatory Information/15-法规信息

### Law information/法律信息:

《Dangerous Goods Regulations》/《危险品条例》

《Recommendation on the Transport of Dangerous Goods Model Regulations》/《关于危险货物运输的示范条例的建议》



《International Maritime Dangerous Goods》/《国际海上危险货物》  
《Technical Instructions for the Safe Transport of Dangerous Goods》/《危险货物安全运输技术规程》  
《Classification and code of dangerous Goods》/《危险品分类及代码》  
《Occupational Safety and Health Act》(OSHA)/《职业安全与健康法》(OSHA)  
《Toxic Substance Control Act》(TSCA)/《有毒物质控制法》(TSCA)  
《Consumer Product Safety Act》(CPSA)/《消费品安全法》(CPSA)  
《Federal Environmental Pollution Control Act》(FEPCA)/《联邦环境污染控制法》(FEPCA)  
《The Oil Pollution Act》(OPA)/《石油污染法》(OPA)  
《Superfund Amendments and Reauthorization Act Title III(302/311/312/313)》(SARA)/《超级基金修正案和重新授权法》第三章(302/311/312/313)(SARA)  
《Resource Conservation and Recovery Act》(RCRA)/《资源保护与恢复法》(RCRA)  
《Safety Drinking Water Act》(CWA)/《安全饮用水法》(CWA)  
《California Proposition 65》/《加州 65 号提案》  
《Code of Federal Regulations》(CFR)/《联邦法规代码》(CFR)  
In according with all Federal, State and local laws./遵守所有联邦,州和地方法律。

## Section 16 - Additional Information/16-其他信息

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