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### 1. Identification Of Substance

Product DetailsProduct Name:SEALED LEAD ACID BATTERYManufacturer/Supplier By:MCA BATTERY MANUFACTURE CO., LTDDuichuan Industrial Park, Yanghe(Renhe), Gaoming, Foshan City, ChinaTel: +86-757-66852604Emergency Tel: +86-(0) 15118779002Fax: +86-757-66852601

### 2. Composition/Data On Components

COMPONENT	CAS #	% by wt.
Electrode plate: Lead	7439-92-1	66.2%
Electrolyte: Dilute sulphuric acid	7664-93-9	24.5%
Separator: Fiberglass	65997-17-3	2.7%
Battery shell: ABS	9003-56-9	6.6%

#### 3. Hazards Identification

#### Hazard description:



Harmful

Do not short circuit, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product. Risk of fire or explosion.

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.

# 4. First aid Measures Eyes:

Skin:

Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention. Wash off skin thoroughly with water. Remove contaminated clothing and wash

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	before reuse. In severe cases obtain me	dical attention.
Inhalation:	Remove from exposure, rest and keep w attention.	arm. In severe cases obtain medical
Ingestion:	Wash out mouth thoroughly with water an medical attention.	nd give plenty of water to drink. Obtain
Further treatment:	All cases of eye contamination, persisten	t skin irritation and casualties who
	have swallowed this substance or been a	iffected by breathing its vapours
	should be seen by a Doctor.	

5. Fire Fighting Measures	
Extinguishing Media:	Water, CO <sub>2</sub> .
Special Fire-Fighting Procedures:	Self-contained breathing apparatus.
Unusual Fire and Explosion	
Hazards:	Battery may vent when subjected to excessive heat-exposing battery contents.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide and other irritating and toxic fumes.

6. Accidental Release Measures	
Steps to be Taken in case Materi	al
is Released or Spilled:	If the battery material is released, remove personnel from area until fumes dissipate.
	Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.
Waste Disposal Method:	It is recommended to discharge the battery to the end, handing in the abandoned batteries to related department unified, dispose of the batteries in accordance with approved local, state, and federal requirements. Consult state environmental protection agency and/or federal EPA.

# 7. Handling And Storage

The batteries 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.

Do not short circuit terminals, or forced over-discharge, throw to fire.

Do not crush or puncture the battery, or immerse in liquids.



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#### Precautions to be taken in handling and storing

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.

Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

#### **Other Precautions**

Batteries may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures.

### 8. Exposure Controls And Personal Protection

Respiratory protection:	If the battery leaks, the need for full ventilation.
Hand Protection:	Under normal use, do not.
Personal Protection:	Under normal use, do not.
Other protection:	Under normal use, do not.
If the battery leaks, must wear the following protection products	

If the battery leaks, must wear the following protection products.

$\bigcirc$	Respiratory protection	In all fire situations, use self-contained breathing apparatus.
(Ma)	Hand protection	In the event of leakage wear gloves.
	Eye protection	Safety glasses are recommended during handling.
	Other	In the event of leakage, wear chemical apron.

9. Physical And Chemical Properties	
Form:	Battery
Color:	Multicolor
Odor:	Odorless
pH:	Not applicable unless individual components exposed.



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Flash point:	Not applicable unless individual components exposed.
Flammability:	Not applicable unless individual components exposed.
Relative density:	Not applicable unless individual components exposed.
Solubility (water):	Not applicable unless individual components exposed.
Solubility (other):	Not applicable unless individual components exposed.

10. Stability And Reactivity	
Stability:	Stable
Hazardous Decomposition	
Products:	N/A.
Conditions to Avoid:	Heating, mechanical abuse and electrical abuse.
Materials to Avoid:	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong
	alkalis, halogenated hydrocarbons.

#### **11. Toxicological Information**

Inhalation, skin contact and eye contact are possible when the battery is opened.

Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.

12. Ecological Information	
Environmental Impact:	Proper use and disposal of the battery will not harm the environment.
	Dispose of the battery, away from water, rain and snow.

13. Disposal Considerations	
Appropriate Method of Disposal of	F
Substance or Preparation:	Dispose of the batteries in accordance with approved local, state, and federal
	requirements. Consult state environmental agency and/or federal EPA.

#### 14. Transport Information

All batteries are starved electrolyte batteries which means the electrolyte is absorbed in the separator material. The batteries are also sealed.

U.S. DOT: All batteries are classified as NONSPILLABLE. They have been tested and meet the nonspillable criteria listed in 49 CFR § 173.159(f) and 173.159a(d). Nonspillable batteries are excepted from 49 CFR Subchapter C requirements, provided that the following criteria are met: 1. The batteries must be securely packed in strong outer packaging and meet the requirements of 49 CFR § 173.159a. 2. The batteries' terminals must be protected against



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short circuit. 3. Each battery and their outer packaging must be plainly and durably marked "NONSPILLABLE " or "NONSPILLABLE BATTERY". The exception from 49 CFR, Subchapter C means shipping papers need not show proper shipping name, hazard class, UN number, and packing group and hazardous labels are not required when transporting a nonspillable battery.

**IATA:** All batteries have been tested and meet the nonspillable criteria listed in IATA Packing Instruction 872 and Special Provision A67. Nonspillable batteries must be packed according to IATA Packing Instruction 872. This means shipping papers need not show proper shipping name, hazard class, UN number, and packing group and hazardous labels are not required when transporting a nonspillable battery. These batteries are excepted from all IATA regulations provided that the batteries are packed in a suitable outer packaging and there terminals are protected against short circuits.

**IMDG:** All batteries have been tested and meet the nonspillable criteria listed in Special Provision 238. Nonspillable batteries must be packed according to IMDG Packing Instruction P003. This means shipping papers need not show proper shipping name, hazard class, UN number, and packing group and hazardous labels are not required when transporting a nonspillable battery. These batteries are expected from all IMDG code provided that the batteries are packed in a suitable outer packaging and their terminals are protected against short circuits per PP16.

## 15. Regulations

Law Information 《Dangerous Goods Regulation》 《Recommendations on the Transport of Dangerous Goods Model Regulations》 《International Maritime Dangerous Goods》 《International Maritime Dangerous Goods》 《Technical Instructions for the Safe Transport of Dangerous Goods》 《Classification and code of dangerous goods》 OSHA Hazard Communication Standard Status Toxic Substances Control Act (TSCA) Status SARA Title III RCRA In accordance with all Federal, State and Local laws

## 16. Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furtished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.