

Safety Data Sheet (SDS)

Lead-acid batteries

Client	Chongqing Boya Technology DevelopmentCo.,Ltd		
Add. of Client	ChongqingQijianglndustrialPark		
Description	Lead-acid batteries		
Model /Type	6-M-14 6-M-21 6-M-7 6-M-9 6-M-5		
Manufacturer	Chongqing Boya Technology DevelopmentCo.,Ltd		
Add. of Manufacturer	ChongqingQijiangIndustrialPark		
Nominal Voltage	12V (14Ah 168Wh)		
Date of Receipt	2023-02-06		
Laboratory	Dongguan ZRLK Testing Technology Co., Ltd.		
	Building D, No.2, Jinyuyuan Mansion, No.18, Industrial West Road,		
Address	Songshan Lake High-tech Industrial Development Zone, Dongguan,		
	Guangdong, China		
Approved Signatory	Maggie.Gao Ailis.Ma Ailis Ma Lahm Peng Lahm Peng		
Inspected by	Ailis.Ma ZRLK WERCS		
Censored by	Lahm Peng Lahm Peng		

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product name: Lead-acid batteries

Model: 6-M-14 6-M-21 6-M-7 6-M-9 6-M-5

Other means of identification

Synonyms:none

Recommended use of the chemical and restrictions on use

Recommended Use: Used in electronic equipments or Electric Equipment;

Uses advidsed against:

- a) Do not dismantle, open or shred secondary cells or batteries.
- b) Do not expose cells or batteries to heat or fire. Avoid storage in direct sunlight.
- c) Do not short-circuit a cell or a battery. Do not store cells or batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
- d) Do not remove a cell or battery from its original packaging until required for use.
- e) Do not subject cells or batteries to mechanical shock.
- f) In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
- g) Do not use any charger other than that specifically provided for use with the equipment.
- h) Observe the plus (+) and minus (-) marks on the cell, battery and equipment and ensure correct use.
- i) Do not use any cell or battery which is not designed for use with the equipment.
- j) Do not mix cells of different manufacture, capacity, size or type within a device.
- k) Battery usage by children should be supervised.
- 1) Seek medical advice immediately if a cell or a battery has been swallowed.
- m) Always purchase the battery recommended by the device manufacturer for the equipment.
- n) Keep cells and batteries clean and dry.
- o) Wipe the cell or battery terminals with a clean dry cloth if they become dirty.
- p) Secondary cells and batteries need to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
- q) Do not leave a battery on prolonged charge when not in use.
- r) After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance.
- s) Retain the original product literature for future reference.
- t) Use only the cell or battery in the application for which it was intended.
- u) When possible, remove the battery from the equipment when not in use.
- v) Dispose of properly.

Details of the supplier of the safety data sheet:

Supplier Name: Chongqing Boya Technology DevelopmentCo.,Ltd

Address: ChongqingQijianglndustrialPark

Telephone number of the supplier: 0086-17784255875

Fax: -Postcode: --

E-mail address: YANGKE6929@163.COM

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Emergency telephone number

Company Emergency Phone Number: 0086-17784255875

Summary: As per request, the contents and formats of SDS are prepared in accordance with European Commission Directives 67/548/EEC, 1999/45/EC, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and Regulation(EU) No 453/2010, and is provided per attached.

Remark: The SDS is prepared based on the information provided by client.

2. HAZARDS IDENTIFICATION

Classification

No harm at the normal use. If contact the Electrolyte liquid in the battery, reference as follows:

Classification of the substance or mixture

Classification according to Regulation (EC) NO 1272/2008

Classification according to GHS

Acute Toxicity, Oral(Hazard category 4)

Acute Toxicity, Dermal(Hazard category 3)

Skin, irritate(Cagegory 1B)

Eye Irritate (Hazard category 1)

GHS Label elements, including precautionary statements:



GHS02



GHS05



GHS06

Signal word: Warning Hazard statement(s):

H242: Heating may cause a fire;

H311: Toxic in contact with skin:

H314: Causes severe skin burns and eye damage;

H302: Harmful if swallowed;

precautionary statements:

Prevention:

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P312:Call a Poison center or doctor/physician if you feel unwell.

P302+P350-IF ON SKIN: Gently wash with plenty of soap and water

P301+P330+P331-IF SWALLOWED: rise mouth. Do NOT induce vomiting

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

None

Disposal

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P501: Dispose of contents/container in accordance with local/national regulations

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

DANGER Contains: Lead, Sulfuric Acid(Electrolyte), Lead Compounds, Arsenic.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterixation: Mixtures

Description:

Product: Consisting of the following components.

Common Chemical Name	Concentration (%)	CAS Number
Lead	6	7439-92-1
ABS resin	8	9003-56-9
Sulfuric acid	20	7664-93-9
Lead peroxide	60	1309-60-0
Copper	1	7440-50-8
Glass fiber	4	65997-17-3
Bicyclo[2.2.1]hept-2-ene, 5-ethylidene-, polymer with ethene and 1-propene	1	25038-36-2

Note: CAS number is Chemical Abstract Service Registry Number.

N/A=Not apply.

4. FIRST-AID MEASURES

First aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin Contact Remove contaminated clothing and shoes. Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Swallowing Do not induce vomiting. Get medical attention.

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

CO2, dry chemical powder, water spray.

Unsuitable Extinguishing Media:No information available.

Specific Hazards Arising from the Chemical

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide(CO)

Carbon dioxide

Other irritating and toxic gases.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No

Sensitivity to Static Discharge No

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. For example: Wear self-contained respiratory protective device. Wear suitable protective clothing and eye/face protection.

Special hazards arising from the substance or mixture:

Battery may burst and release hazardus decomposition products when exposed to a fire situation. Valve Regulated Sealed Valve Regulated Sealed Lead Acid Batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature (>150 °C), When damaged or abused(e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes.

Refer to section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Evacuate personnel to safe areas.

Environmental precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

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Methods for Cleaning up Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other Non combustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.

Wash thoroughly after handling. Use this material with adequate ventilation.

The product is not explosive.

Conditions for safe storage, including any incompatibilities

If the Valve Regulated Sealed Lead-acid batteries is subject to storage for such a long term as more than 3 months, it is recommended to recharge the Battery for mobile elevating work platform QM100-12 periodically.

3 months: -10°C~+40°C, 45 to 85%RH

And recommended at 0°C~+35°C for long period storage.

The capacity recovery rate in the delivery state (50% capacity of fully charged) after storage is assumed to be 80% or more.

Do not storage Valve Regulated Sealed Lead-acid batteries 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 Battery to heat or fire. Avoid storage in direct sunlight.

Do not store together with oxidizing and acidic materials.

Keep ignition sources away- Do not smoke.

Store in cool, dry and well-ventilated place.

Incompatible Products None known.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Ingredients with limit values that require monitoring at the workplace:		
1309-60-0 Lead peroxide		
TLV (USA)	0.02mg/m ³	
MAK (Germany)	0.1mg/m^3	

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962(11th Cir., 1992).

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

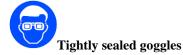
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Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection:



Body protection:

Protective work clothing.

Skin protection:



Protective gloves

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Form: Prismatic		
	Color: Black		
	Odour: Odourless		
	Odor Threshold: No information available		
Change in condition:			
pH, with indication of the concentration		Not determined.	
Melting point/freezing point		Not determined.	
Initial boiling point and Boiling range:		Not determined.	
Flash Point		Not determined.	
Evaporation rate		Not determined.	
Flammability (solid, gas)		Not determined.	

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Upper/lower flammability or explosive limits	Not determined.
Vapor Pressure:	Not determined.
Vapor Density:	Not determined.
relative density:	Not determined.
Solubility in Water:	Not determined.
Solubility in other solvents	Not determined.
n-octanol/water partition coefficient	Not determined.
Auto-ignition temperature	Product is not self-igniting.
Decomposition temperature	Not determined.
Odout threshold	Not determined.
Evaporation rate	Not determined.
Viscosity	Not determined.
Other Information	No further relevant information available.

10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage and handling conditions (see section 7, Handling and storage).

Chemical stability: Stable under normal conditions of use, storage and transport.

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

<u>Possibility of Hazardous Reactions:</u> None under normal processing.

<u>Hazardous Polymerization:</u> Hazardous polymerization does not occur.

<u>Conditions to avoid:</u> Strong heating, fire, Incompatible materials.

<u>Incompatible materials:</u> Strong oxidizing agents. Strong acids.Base metals.

<u>Hazardous Decomposition Products:</u>Carbon oxides, Other irritating and toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute toxiciy: No data available.

LD/LC50 values relevant for classification:

Not available.

Skin corrosion/irritation: Causes skin irritation, serious eye damage. Contact with internal components may cause irritation or servere burns.

Serious eye damage/irritation: Cause serious eye irritation.

Respiratory or skin sensitization: No sensitizing effects known. **Specific target organ system toxicity:** No information available.

CMR effects(carcinogenity, mutagenicity and toxicity for reproduction): No information available.

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12. Ecological Information

Toxicity:

Acquatic toxicity:

No further relevant information available.

<u>Persistence and degradability:</u> No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation: Must not be disposed together with household garbage.

Do not allow product to reach sewage system

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

This report applies to by sea, by air and by land;

The **Lead-acid batteries** according to PACKING INSTRUCTION 238 of the 2022 IATA Dangerous Goods regulations 63rd Edition may be transported. and applicable U.S. DOT regulations for the safe transport of **Lead-acid batteries**.

batteries offered for transport must be packed in inner packaging's that completely enclose the battery; to provide protection from damage or compression to the batteries, the inner packaging's must be placed in a strong rigid outer packaging;

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. The materials and pack design shall be chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture.

The package must be handled with care and that a flammability hazard exists if the package is damaged; With regard to transport, the following regulations are cited and considered:

- The International Civil Aviation Organization (ICAO) Technical Instructions.
- The International Air transport Association (IATA) Dangerous Goods Regulations.
- The International Maritime Dangerous Goods (IMDG) Code (Amdt 40-20 Edition).
- The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA
- The Office of Hazardous Materials Safety within the US Department of Transportations' (DOT) Research and Special Programs Administration (RSPA)

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Maritime transport in bulk according to IMO instruments: International maritime dangerous goods code (IMDG CODE Amdt 40-20), Not Restricted As per IMDG CODE Special Provision 238;

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information: No information available.

Chemical safety assessment A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

R20/22: Harmful by inhalation and if swallowed.

R36: Irritating to eyes.

H302: Harmful if swallowed. H332: Harmful if inhaled.

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