

SAFETY DATA SHEET

Sealed, non spillable maintenance free battery 6MF14 12V14Ah

Sichuan Liyang Industry Co., Ltd

- According to GHS (Seventh Revised Edition)

SDS

Section 1 Product and Company Identification

> Product Identifier

Product Name Sealed, non spillable maintenance free battery 6MF14 12V14Ah

Synonyms -

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses Please consult manufacturer.

Uses Advised Against Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name Sichuan Liyang Industry Co., Ltd

Application Address Yanhuasi Industry Park, Anju District, Suining City, Sichuan P.R.China

Applicant Post Code 401320

Applicant Telephone +86-825-62597757

Applicant Fax +86-825-62571653

Applicant E-mail battery619@126.com

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Supplier E-mail battery619@126.com

> Emergency Phone Number

Emergency Phone Number +86-825-62597757

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the seventh revised edition):

> GHS Hazard Class

Skin Corrosion/Irritation Category 1

Eye Damage/Irritation Category 1

Reproductive Toxicity Category 1

Reproductive Toxicity Additional

> GHS Label Elements

Pictogram



Signal Word

Danger

> Hazard Statements

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H360	May damage fertility or the unborn child
H362	May cause harm to breast-fed children

> Precautionary Statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash contact area 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

P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see measures on this label).
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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

P405	Store locked up.
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Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Section 3 Composition/Information on Ingredients

Component	Concentration (weight percent, %)	CAS No.	EC No.
Lead	64.91	7439-92-1	231-100-4
Glass, oxide, chemicals	5.32	65997-17-3	266-046-0
Sulphuric acid	10.08	7664-93-9	231-639-5

Water

11.51

7732-18-5

231-791-2

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Do not open battery. Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of First-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

- 1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing Media	Dry chemical, carbon dioxide, water spray, alcohol-resistant foam.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter or spread fire.

> Specific Hazards Arising from the Substance or Mixture

- 1 Containers may explode when heated.
- 2 Fire exposed containers may vent contents through pressure relief valves.
- 3 May expansion or decompose explosively when heated or involved in fire.

> Advice for Firefighters

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

> Environmental Precautions

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

> Methods and Materials for Containment and Cleaning Up

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage

> Precautions for Handling

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

> Precautions for Storage

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/ hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

Component	Country/Region	Limit Value - Eight Hours		Limit Value - Short Term	
		ppm	mg/m ³	ppm	mg/m ³
Lead 7439-92-1	USA - OSHA	-	0.05	-	-
	South Korea	-	0.05	-	-
	Ireland	-	0.15	-	-
	Germany (AGS)	-	0.15	-	-
	Denmark	-	0.05	-	0.1
	Australia	-	0.15	-	-
Sulphuric acid 7664-93-9	USA - OSHA	-	1	-	-
	South Korea	-	0.2	-	0.6
	Ireland	-	0.05	-	-
	Germany (AGS)	-	0.1	-	0.1
	Denmark	-	1	-	2

	Australia	-	1	-	3
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Biological Limit Values

No information available

Monitoring Methods

- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 160 Determination of toxic substances in workplace air(Series effective standard)and GBZ/T 300 Determination of toxic substances in workplace air(Series standard).

> Engineering Controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

> Personal Protection Equipment

Eye Protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
Hand Protection	Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and Body Protection	Wear fire/flame resistant/retardant clothing and antistatic boots.

Section 9 Physical and Chemical Properties

Appearance: Black Plastics cement shell Battery	Odor: No information available
Odor Threshold: No information available	pH: No information available
Melting Point/Freezing Point (°C): No information available	Initial Boiling Point and Boiling Range (°C): No information available
Flash Point (°C)(Closed Cup): Not applicable	Evaporation Rate: Not applicable
Flammability: No information available	Upper/lower explosive limits[% (v/v)]: Upper limit: No information available; Lower limit: No information available
Vapor Pressure (KPa): Not applicable	Relative Vapour Density(Air = 1): Not applicable
Relative Density(Water=1): No information available	Solubility: No information available
n-Octanol/Water Partition Coefficient: No information available	Auto-Ignition Temperature(°C): No information available
Decomposition Temperature (°C): No information available	Kinematic Viscosity (mm²/s): Not applicable
Particle characteristics: No information available	

Section 10 Stability and Reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical Stability	Stable under proper operation and storage conditions.
Possibility of Hazardous Reactions	Reacts severely with halogens, interhalogens or other strong oxidants, or causes a fire. In contact with active metals (alkali metals, Na, Ca etc.) causes a

	reaction and release hydrogen.
Conditions to Avoid	Incompatible materials, heat, flame and spark.
Incompatible Materials	Halogen, interhalogen, strong oxidant, water and acids. Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.
Hazardous Decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

> Acute Toxicity

Component	CAS No.	LD ₅₀ (Oral)	LD ₅₀ (Dermal)	LC ₅₀ (Inhalation, 4h)
Sulphuric acid	7664-93-9	2140mg/kg(Rat)	No information available	No information available

> Skin Corrosion/Irritation

Causes severe skin burns and eye damage(Category 1)

> Serious Eye Damage/Irritation

Causes serious eye damage(Category 1)

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

ID	CAS No.	Component	IARC	NTP
1	7439-92-1	Lead	Category 2B	Not Listed
2	65997-17-3	Glass, oxide, chemicals	Not Listed	Not Listed
3	7664-93-9	Sulphuric acid	Category 1	Not Listed
4	7732-18-5	Water	Not Listed	Not Listed

> Reproductive Toxicity

May damage fertility or the unborn child(Category 1)

> Reproductive Toxicity (Additional)

May cause harm to breast-fed children(Additional)

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

No information available

> Aspiration Hazard

No information available

Section 12 Ecological Information

> Acute Aquatic Toxicity

Component	CAS No.	Fish	Crustaceans	Algae
Lead	7439-92-1	LC ₅₀ : 2.8mg/L (96h)(Fish)	No information available	No information available

> Chronic Aquatic Toxicity

No information available

> Others

**Persistence and
Degradability
Bioaccumulative
Potential
Mobility in Soil**

No information available

No information available

No information available

**Results of PBT and
vPvB Assessment**

Lead meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Glass, oxide, chemicals does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Sulphuric acid does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Water does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Section 13 Disposal Considerations

Waste Chemicals

Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

**Contaminated
Packaging
Disposal
Recommendations**

Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. Refer to section 13.1 and 13.2.

Section 14 Transport Information

Transporting Label

Not applicable

UN Number

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UN Proper Shipping Name	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Transport Hazard Class	None
Transport Subsidiary Hazard Class	None
Packing Group	-
Comment	The sample has passed the test items of UNITED NATIONS Recommendations on the TRANSPORT OF DANGEROUS GOODS Regulations (20th) ST/SG/AC. 10/1/Rev.20 Chapter 3.3 SPECIAL PROVISIONS 238.

Section 15 Regulatory Information

> International Chemical Inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Lead	✓	✓	✓	✓	✓	✓	✓	✓	✗
Glass, oxide, chemicals	✓	✓	✓	✓	✓	✓	✓	✓	✗
Sulphuric acid	✓	✓	✓	✓	✓	✓	✓	✓	✓
Water	✓	✓	✓	✓	✓	✓	✓	✓	✗

【EINECS】 European Inventory of Existing Commercial Chemical Substances.

【TSCA】 United States Toxic Substances Control Act Inventory.

【DSL】 Canadian Domestic Substances List.

【IECSC】 China Inventory of Existing Chemical Substances.

【NZIoC】 New Zealand Inventory of Chemicals.

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances.

【KECI】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

Note

"✓" Indicates that the substance included in the regulations

"✗" That no data or included in the regulations

Section 16 Additional Information

Creation Date 2019/12/16

Revision Date 2019/12/16

Reason for Revision -

> Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 7th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.