Effective Date: 2019/12/16 DG1958077E

SAFETY DATA SHEET

Sealed, non spilable maintenance free battery 6MF14 12V14Ah

SDS

Sichuan Liyang Industry Co., Ltd

According to GHS (Seventh Revised Edition)

Section 1 Product and Company Identification

> Product Identifier

Product Name Sealed, non spilable 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

Supplier Name Sichuan Liyang Industry Co., Ltd

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

Supplier Post Code 401320

 Supplier Telephone
 +86-825-62597757

 Supplier Fax
 +86-825-62571653

 Supplier E-mail
 battery619@126.com

> Emergency Phone Number

Emergency Phone +86-825-62597757 Number

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

Eye Damage/Irritation

Category 1

Category 1

Category 1

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 childH362 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.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

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 Immediate medical attention is required. Show this safety data sheet (SDS) to

the doctor in attendance.

Eye ContactRinse 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.

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 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

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

Unsuitable

Extinguishing Media

Dry chemical, carbon dioxide, water spray, alcohol-resistant foam.

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

- 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

- Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 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/Dogion	Limit Value	- Eight Hours	Limit Value - Short Term		
	Country/Region	ppm	mg/m³	ppm	mg/m³	
	USA - OSHA	-	0.05	-	-	
	South Korea	-	0.05	-	-	
Lead 7439-92-1	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

Biological Limit Values

No information available

Monitoring Methods

- EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 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

- 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

Body

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US). **Eye Protection**

Wear protective gloves (such as butyl rubber), passing the tests according to **Hand Protection**

EN 374(EU), US F739 or AS/NZS 2161.1 standard.

If exposure limits are exceeded or if irritation or other symptoms are

Respiratory protection experienced, use a full-face respirator with multi-purpose combination (US) or

type AXBEK (EN 14387) respirator cartridges.

Skin and

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 Initial Boiling Point and Boiling Range (°C): No information available

available

Flash Point (°C)(Closed Cup): Not applicable **Evaporation Rate:** Not applicable

Upper/lower explosive limits[%(v/v)]: Upper limit:

Flammability: No information available 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 Solubility: No information available available

n-Octanol/Water Partition Coefficient: No **Auto-Ignition Temperature(°C):** No information

information available available

Decomposition Temperature (°C): No information

available

Particle characteristics: No information available

Kinematic Viscosity (mm²/s): Not applicable

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 Reacts severely with halogens, interhalogens or other strong oxidants, or **Hazardous Reactions** 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 7	7664-93-9	2140mg/kg(Rat)	No information	No information	
	7004-93-9		available	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	No information	No information		
	7439-92-1	(96h)(Fish)	available	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

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

Results of PBT and Regulation (EC) No 1907/2006, annex XIII.

vPvB Assessment

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

Contaminated Packaging

Disposal Recommendations regulation. Recommend the use of incineration disposal. 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

Not applicable **Transporting Label**

UN Number

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 NATIONAS 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

" $\sqrt{}$ " Indicates that the substance included in the regulations

"x" 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.