SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Name of Product: Lead acid battery

1.2 Other means of identification

Product Models: 6DM6.5
Nominal Voltage: 12V
Nominal capacity: 6.5Ah
Nominal Power: 78Wh

1.3 Recommended use of the chemical and restriction on use

Recommended Use: Lead Acid (Non-Spillable) Battery
Restriction on Use: No information available

1.4 Information Of Supplier:

Company Name: SICHUAN LIYANG INDUSTRY CO.LTD
Address: YANHUASI INDUSTRY ZONE, ANJU DIST. SUINING, SICHUAN P.R. CHINA
Zip code: 629000
Contact person: Chun Dongmei
Tel: +86-023-62571745
E-mail: Battery928@126.com

1.5 Emergency Telephone

+86-17708311919

Section 2: Hazard(s) Identification

2.1 Classification

This product is an article which is a sealed battery and as such does not require an SDS per the OSHA hazard communication standards unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity – Oral	Category 3
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1A
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Germ cell mutagenicity	Category 1
Reproductive toxicity	Category 1A

2.2 Label elements

2.2.1 Signal Word Danger

2.2.2 Hazard Statements

Cause severe skin burns and eye damage
Harmful if swallowed or inhaled.

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May damage fertility or the unborn child.
May cause damage to the reproductive system, the blood, the brain and the endocrine system through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.
Toxic if swallowed or inhaled.

2.2.3 Symbol



This product is an article which contains a chemical substance. Safety information is given for exposure to the article as solid. Intended use of the product should not result in exposure to the chemical substance, This is a battery. In case of rupture: the above hazards exist.

2.3 Precautionary Statements

2.3.1 Precautionary Statements – Prevention

Do not breath dust/fume/gas/mist/vapors/spray.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use personal protective equipment as required.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash face, hands and any exposed skin thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Keep away from flames and hot surface –no smoking.

2.3 .2Precautionary Statements – Response

If exposed or connected: Get medical advice/attention. Specific treatment (see supplemental first aid/instruction on this label).

Skin
If on skin: wash with plenty of soap and water. Take off contaminated clothing and water before reuse, if skin irritation or rash occurs: get medical advice/attention if feel unwell.

Eye
If in eyes: Rinse cautiously with water for several minutes, remove contact lenses, if present and easy to do, Continue rinsing. Call a poison center or doctor/physician.

Inhalation
If inhalation: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor/physician.

Ingestion
If swallowed: rinse mouth, do not induce vomiting ,Call a poison center or doctor/physician if feel unwell.

2.3.3 Precautionary Statements – Storage

Store locked up

2.3.4 Precautionary Statements – Disposal

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

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regulations.

2.4 Hazards not otherwise classified (HNOC)

Not applicable

2.5 Unknown Toxicity

9% of the mixture consists of ingredient(s) of unknown toxicity.

2.6 Other information

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.7 Interactions with other chemicals

Use of alcoholic beverages may enhance toxic effect.

Section 3: Composition/ Information on Ingredients

Chemical Name	CAS No.	Weigh%
Sulfuric acid	7664-93-9	10.08
Glass Fiber	65997-17-3	5.32
Lead	7439-92-1	64.91
Water	7732-18-5	19.71

Section 4: First Aid Measures

4.1 General Advice

First aid is Applicable only in the case of cell rupture.

4.1.1 Eye contact

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area.

4.1.2 Skin Contact

Wash off immediately with plenty of water and soap for at least 15 minutes. In the case of skin irritation or allergic reaction see a physician. May cause an allergic skin reaction.

4.1.3 Inhalation of Vented Gas

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the

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substances; give artificial respiration with the aid of a pocket mask equipped with a one-way value or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get medical attention immediately if symptoms occur.

4.1.4 Ingestion

Do not induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.1.5 Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved. Take precaution to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personnel protective equipment as required. Wear personnel protective clothing (see section8).

4.2 Most important symptoms and effects, both acute and delayed

Burning sensation, Itching. Rashes. Hives,Coughing.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization of susceptible persons. Treat symptomatically.

Section 5: Fire –Fighting Measures

5.1 Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. For example, dry powder or dry sand.

5.2 Unsuitable Extinguishing Media

CAUTION: DO NOT use water.

5.3 Specific Hazards Arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Product is or contains a sensitizer.

Hazardous Combustion products

Sulfur oxides

5.4 Explosion Data

Sensitivity to Mechanical Impact :No.
Sensitivity to Static Discharge: No.

5.5 Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/IOSH

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(approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental Precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3 Methods for containment

Prevent further leakage or spillage if safe to do so. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

6.4 Methods for cleaning up

Pick up and transfer to properly labeled containers.

Section 7: Handling and Storage

7.1 Precaution for safe handling

In case of rupture, use personal protection equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

Incompatible products

Strong acids. Strong oxidizing agent. Strong bases. Organic matter.

Section 8: Exposure Controls/Personal Protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m^3	TWA: 1 mg/m^3	IDLH: 15 mg/m^3 TWA: 1 mg/m^3
Lead 7439-92-1	TWA: 0.05mg/m^3	TWA: 0.05 mg/m^3	IDLH:100 mg/m^3((as Pb) TWA: 0.05mg/m^3

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ACGIH TLV: American Conference of Governmental Industrial Hygienists-Threshold Limit Value
OSHA PEL：Occupational Safety and Health Administration-Permissible Exposure Limits
NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines:
Vacated limits revoked by the court of Appeals decision in AFL-CLO v. OSHA, 965F, 2d 962(11th Cir., 1992) See section 15 for national exposure control parameters.

8.2 Appropriate engineering controls

Engineering Measures:

Showers、 Eyewash stations、Ventilation systems

8.3 Individual protection measures, such as personal protective equipment

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.

Eye /face protection: if splashes are likely to occur: Wear safety glasses with side shields(or goggles). None required for consumer use.

Skin protection: Wear protective gloves and protective clothing. Long sleeved clothing. Imperious gloves.

Hygiene Measure: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use. No information available.

Section 9: Physical and Chemical Properties

Physical State: Solid

Color: Black

Odor: Odorless

Odor Threshold: No information available

pH: No data available

Melting/freezing point: No data available

Boiling point/boiling range: No data available

Flash Point: No data available

Evaporation Rate: No data available

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Flammability (Solid, gas): No data available

Flammability Limit in Air:

Upper flammability limit: No data available

Lower flammability limit: No data available

Vapor pressure: No data available

Vapor density: No data available

Specific Gravity: No data available

Solubility: Insoluble in water

Partition coefficient:n-octanol/water: No data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Kinematic viscosity: No data available

Dynamic viscosity: No data available

Section 10: Stability and Reactivity

Reactivity:
No data available

Chemical stability:
Stable under recommended storage conditions.

Possibility of Hazardous Reactions:
None under normal processing.

Hazardous Polymerization:
Hazardous polymerization dose not occur.

Conditions to avoid:
Do not subject battery to mechanical shock. Keep away from open flames, high temperature.

Incompatible materials:
Strong acids, Strong oxidizing agents. Strong bases. Metal powders. Halogens. Cyanides.

Hazardous decomposition products:
Sulfur oxides

Section 11: Toxicological Information

11.1 Information on likely routes of exposure

Product information:
Product does not present an acute toxicity hazard based on known or supplied information. In

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case of rupture:

Inhalation:
Specific test data for the substance or mixture is not available. Corrosive by inhalation(base on components). Inhalation of corrosion fumes/gases may cause coughing, choking, headache, dizziness and weakness for several hour. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure and increased heart rate. Inhaled corrosion substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye Contact:
Specific test data for the substance or mixture is not available. Cause burns. (based on components). Corrosion to the eyes and may cause severe damage including blindness. Cause serious eye damage. May cause irreversible damage to eyes.

Skin Contact:
Specific test data for the substance or mixture is not available. Corrosion (based on components). Cause burns. Toxic in contact with skin. May be absorbed through the skin in harmful amounts.

Ingestion:
Specific test data for the substance or mixture is not available. Cause burns. (based on components). Ingestion cause burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 320 mg/m^3 (Rat) 2 h
Lead 7439-92-1	= 1000 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Symptoms:
Erythema (skin redness). May cause redness and tearing of eyes. Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Coughing and/or wheezing.

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization: May cause sensitization of susceptible person, May cause sensitization by skin contact. May cause sensitization by inhalation.

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Mutagenic Effects: No information available.

Carcinogenicity: the table below whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid 7664-93-9	A2	Group 1	Known	X
Lead 7439-92-1		Group 2A	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)
A1 - Known Human Carcinogen
A3- Animal Carcinogen
IARC (International Agency for research on Cancer)
1 - Carcinogenic to Humans
2A - Probably Carcinogenic to Humans Group
2B- Possibly Carcinogenic to humans
NTP (National Toxicology Program) Reasonably Anticipated- reasonably anticipated to be a human Carcinogenic.
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational safety and Health Administration of the US Department of Labor)
X-Present

Reproductive Toxicity: Contains a known or suspected reproductive toxin.

STOT- single exposure: No information available.

STOT- repeated exposure: Cause damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE)

Chronic Toxicity: Prolonged exposure may cause chronic effects. Repeated contact may cause allergic reactions in very susceptible persons. Contain a known or suspected carcinogen. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

Target Organ Effects: Respiratory system. Eyes. Skin. Gastrointestinal tract(GI). Blood. Central Nervous System(CNS). Kidney. Liver. Lungs. Nasal cavities.

Aspiration Hazard: No information available.

11.4 Numerical measures of toxicity product information

The following values are calculated based on chapter 3.1 of the GHS document.
ATE mix(oral): 1600 mg/kg
ATE mix(dermal): 1540 mg/kg (ATE)
ATEmix (inhalation) : 160 mg/l

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Section 12: Ecological Information

Ecotoxicity : Very toxic to aquatic life with long lasting effects.

Persistence and Degradability: No information available

Bioaccumulation: No information available

Other adverse effects: No information available

Section 13: Disposal Considerations

13.1Waste treatment methods

Disposal methods:
This material, as supplied, is a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. Should not be released into the environment.

Contaminated Packaging:

Dispose of in accordance with federal, state and local regulations.

California Hazardous Waste Codes 141
This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Sulfuric acid 7664-93-9	Toxic Corrosive
Lead 7439-92-1	Toxic

Section 14: Transportation Information

According to IATA DGR 62nd Edition for transportation, assemble articles strictly according to Hazardous Goods Transport Rules of Railway Station , The batteries should be securely packed and protected against short-circuits. Examine whether the package of the containers are integrate and tighten closed before transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. When transported by sea, the assemble place should keep away from bedroom and kitchen, and isolated from the engine room, power and fire source. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, don’ t stop over in the residential area and congested area. Forbid to use wooden, cement for bulk transport.

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UN-Number DOT, IMDG, IATA: UN2800

UN proper shipping name DOT, IMDG, IATA: Batteries, wet, non-spillable

Transport hazard class DOT, IMDG, IATA 8

Packing group DOT, IMDG, IATA: Ⅱ

TDG: Not regulated
MEX: Not regulated
ICAO: Not regulated
Ems No.: F-A,S-B
RID: Not regulated
ADR: Not regulated
AND: Not regulated

Section 15: Regulatory information

15.1 International Inventories

TSCA Complies
DSL All components are listed either on the DSL or NDSL.
TSCA – United State Toxic Substance Control Act Section 8(b) Inventory
DSL/NDSL – Canadian Domestic Substance List/Non-Domestic Substance List

15.2 US Federal Regulations

SARA 313: Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986(SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	Weight (%)	SARA313-Threshold values(%)
Sulfuric acid 7664-93-9	30-50	0.1
Lead 7439-92-1	60-90	0.1

15.3 SARA 311/312Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

15.4 CWA (Clean Water Act)

This product contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA -Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9		X	X	X
Lead 7439-92-1		X	X	X

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15.5 CERCLA

This material, as supplied, contain one or more substances regulate as a hazardous under the comprehensive Environmental Response Compensation and Liability Act(CERCLA) (40 CER 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sulfuric acid 7664-93-9		X	

15.6 US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	**California Proposition 65**
Sulfuric acid 7664-93-9	Carcinogen
Lead 7439-92-1	Carcinogen

U.S State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	IIIinois
Sulfuric acid 7664-93-9	×	×	×	×	×
Lead 7439-92-1	×	×	×	×	×

15.7 International Regulations

Canada

WHMIS Hazard Class

Non-controlled

Section 16: Other Information

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used material used in combination with any other materials or in any process, unless specified in the test

Prepared By: SICHUAN LIYANG INDUSTRY CO.LTD

Revision Date: 2021-02-06

--- End of SDS ---

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