



Leoch Battery(Jiangsu) Corp.

SAFETY DATA SHEET VALVE REGULATED LEAD ACID BATTERY

SDS

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product name:	VALVE REGULATED LEAD ACID BATTERY: DJW, DJM, DJ, FT, LHT, LHR, PLH, PLX, LPF, LP, LPC, LPL, XP Series
Company:	Leoch Battery (Jiangsu) Corp.
Address:	North of Shenhua Blvd. (West of Tongtai Road), Jinhu Industry Zone, Jinhu, Huaian, Jiangsu, China
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Fax :	0517-86986329
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Effective Date:	2024/1/1

SECTION 2 HAZARDS IDENTIFICATION

The product is outside of the scope of GHS system.

Main Hazards:	
Fire or Explosion Hazard:	May decompose when heated and generate corrosive and/or toxic fumes.
Health Hazards:	The internal battery materials are corrosive to the eyes, skin, mucous membranes and upper respiratory tract. Cause burns. Avoid directly contacting with the internal battery. Prevent inhalation.
Environmental Hazards:	The internal battery materials may be harmful to the environment and attention should be paid to water bodies.

SECTION 3 INFORMATION ON INGREDIENTS

Product name: VALVE REGULATED LEAD ACID BATTERY			
Ingredient	Concentration	CAS NO.	EC NO.
Inorganic Lead/Lead Compounds	67.55%	7439-92-1	231-100-4
Tin	0.15%	7440-31-5	231-141-8
Dilute Sulfuric Acid	24.5%	7664-93-9	231-639-5
Fiberglass Separator	2.3%	65997-17-3	920-402-8

Case Material: Acrylonitrile Butadiene Styrene (ABS)	5.5%	9003-56-9	618-371-8
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SECTION 4 FIRST-AID MEASURES

Skin Exposure:	If the internal battery's materials of an opened battery cell come into contact with the skin , remove the contaminated clothing, and footwear, immediately flush with plenty of water for at least 20 minutes. Call a physician.
Eye Exposure:	In case of the internal battery's materials in contact with eyes, lift your eyelids immediately and rinse them with running water for more than 20 minutes. Call a physician.
Inhalation Exposure:	If inhaled the internal battery's materials, immediately remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician.
Oral Exposure:	If swallowed the internal battery's materials, do not induce vomiting. If the staff is awake, drink enough warm water or milk. Call a physician.
Most Important Symptoms/Effects, Acute and Delayed:	No data available.
Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:	No data available.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Suitable: Dry chemical, Sandy soil, Carbon dioxide or appropriate foam.
Specific Hazards Arising from the Chemical:	May decompose upon combustion to generate irritating, corrosive or toxic fumes when heated.
Special Protective Action for Fire-fight:	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Entry to noninvolved personnel should be controlled around the leakage area by roping off. Remove all sources of ignition.
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Environmental Precautions:	Avoid leakage getting into the earth, ditches or waters. Avoid directly releasing the washing waste -water into the environment.
Methods and Materials for Containment and Cleaning up:	If case of internal materials leak, use dry soil, dry sand or other non- combustible materials to absorb and cover the leakage. Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling:	Operators should be trained and strictly abide by operating procedures. Wear chemical-resistant protective clothing, chemical-resistant protective gloves and a filter gas mask. Keep away from ignition sources, heat and flame. No smoking at working site. Handling is performed in a well ventilated place. Avoid disassembling the battery at will, reversing battery polarity within the battery assembly and overcharging. Such batteries must be packed in inner packaging in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. In case of leakage of the material in the battery, avoid directly contacting with eyes and skin. Avoid inhalation. Incompatibilities: Strong oxidizing agents, combustible materials and corrosives, organic chemicals, reducing agents, metals, bases and water.
Conditions for Safe Storage, Including Any Incompatibilities:	Store in a cool, dry and well-ventilated area. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, combustible materials, organic chemicals, reducing agents, metals, bases and water. Such batteries must be packed in inner packaging in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Storage place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

SECTION 8 EXPOSURE CONTROL/PPE

Control Parameters:	GBZ 2. 1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace-Part 1: Chemical
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	Hazardous Agents	Lead and inorganic compounds as Pb: Lead dust PC-TWA 0.05mg/m ³ ; Lead fume PC-TWA 0.03mg/ m ³ ,G2B(Lead) ,G2A(Lead inorganic compounds) Sulfuric acid and sulfur trioxide: PC-TWA 1 mg/ m ³ : PC-STEL 2 mg/ m ³ ,G1
	ACGIH	Lead: TLV-TWA 0.05 (Pb) / m3,G2B Lead compounds: TLV-TWA 0.05 (Pb) / m3 Sulfuric acid :TLV-STEL 3mg/ m3; TLV-TWA 1mg/ m3 G1 Tin: TLV-TWA 2mg/m3
Appropriate Engineering Controls:	Mechanical exhaust required. Safety shower and eye bath	
Individual Protection Measures	Eye/Face Protection:	Wear chemical safety glasses
	Skin Protection:	Hand Protection: Wear chemical-resistant protective gloves
		Body Protection: Wear chemical-resistant protective clothing
Individual Protection Measures	Respiratory Protection:	Wear a filter gas mask when you may be exposed to electrolyte fumes
	Thermal Hazards:	No data available.
	Other Protect:	No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Black plastic cement shell
Odor:	Odorless
pH Value:	1 ~ 2
Solubility:	Partial soluble in water
Melting point/Freezing point:	>300°C
Boiling point, Initial boiling point and Boiling Range:	No data available
Flash point (Closed Cup):	No data available
Density/Relative Density:	No data available
Kinematic Viscosity:	No data available
Lower/Upper Explosion Limit/Flammability limit:	No data available
Vapor Pressure:	No data available
Relative vapor Density:	No data available
Partition Coefficient N-Octanol/Water (Log Value):	No data available
Autoignition Temperature :	No data available
Decomposition Temperature:	No data available

Particle Characteristics :	No data available
Flammability (Solid, Gas) :	No data available

SECTION 10 STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Stable under normal temperatures and pressures.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	Avoid misoperation, exposure to heat and open flame. Avoid mechanical or electrical abuse and overcharge. Prevent short circuits. Prevent movement which could lead to short circuits.
Incompatible Materials:	Combustible materials. organic chemicals, reducing agents, metals, strong oxidizing agents, bases and water.
Hazardous Decomposition Products:	Metal oxides, sulfur oxides, sulfuric acid mist, etc.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available
Skin Corrosion/Irritation:	The electrolyte in the battery causes severe skin burns.
Serious Eye Damage/Irritation:	The electrolyte in the battery causes serious eye damage.
Respiratory Sensitization:	No data available.
Skin Sensitization:	No data available.
Carcinogenicity:	The International Agency on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a category 1 carcinogen (inhalation), a substance that is carcinogenic to humans. Misuse of the product, such as overcharging, may result in the generation of sulfuric acid mist at high levels.
Germ Cell Mutagenicity:	No data available.
Reproductive Toxicity:	No data available.
Specific Target Organ Toxicity- Single Exposure:	No data available.
Specific Target Organ Toxicity - Repeated Exposure:	No data available.
Aspiration Hazard:	No data available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity:	No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.

Mobility in Soil:	No data available.
Other Adverse Effects:	No data available.

SECTION 13 DISPOSAL CONSIDERATION

Disposal Method:	The discarded battery is listed in hazardous waste in the "Catalogue of Hazardous Waste", Number: HW31. Category: Lead-containing Waste. The disposal of discarded battery shall comply with the requirements of relevant laws, regulations, policies and standards such as the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste" and "Technical Policy for the Prevention and Control of Waste Battery Pollution". Contact a licensed professional waste disposal service to dispose of wastes. Used battery being transported for disposal or reclamation should be carefully checked prior to shipment to ensure the integrity of each battery and its suitability for transport.
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SECTION 14 TRANSPORT INFORMATION

The product has passed the vibration test, pressure differential test and leakage test at 55°C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations (22nd) SPECIAL PROVISION 238.

RID/ADR (2023 Edition)	The battery is not restricted to RID/ADR according to special provision 238
IATA DGR (65th Edition)	The battery is not restricted to IATA DGR according to special provision A67
IMO IMDG CODE (2022 Edition)	The battery is not restricted to IMO IMDG CODE according to special provision 238

SECTION 15 REGULATORY INFORMATION

Domestic Regulations	Regulations Concerning Road Transportation of Dangerous Goods (JT/T 617-2018)	The battery has passed the vibration test, pressure differential test and leakage test at 55°C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations (22 nd) SPECIAL PROVISION 238. The battery is not restricted to JT/T 617-2018 according to special provision 238.
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	List of Dangerous Goods (GB 12268-2012)	The battery has passed the vibration test, pressure differential test and leakage test at 55°C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations (22 nd) SPECIAL PROVISTON 238. The battery is not restricted to GB 12268-2012 according to special provision 238.
	List of Dangerous Goods by Rail (TB/T 30006-2022)	Number: 815302 Name of Product: Batteries [Wet, Filled with acid, electric storage]. The battery has passed the vibration test, pressure differential test and leakage test at 55°C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations (22 nd) SPECIAL PROVISION 238. The product is not subject to TB/T 30006-2022 according to special provision 77.
International Regulations	Directive 2006/66/EC and 2013/56/EU	The label, disposal and recycling of the battery shall meet the requirements of EU Directive 2006/66/EC and 2013/56/EU.

SECTION 16 OTHER INFORMATION

Preparation Date:	2024/1/1
Preparation Department:	Leoch Battery(Jiangsu) Corp. Tel (Fax): 0517-86986608/0517-86986329
Revision:	2
Abbreviations and Acronyms:	CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists PC-TWA: Permissible concentration-time weighted average PC-STEL: Permissible concentration-short term exposure limit TLV-STEL: Threshold limit value-short term exposure limit TLV-TWA: Threshold limit value-time weighted average G2B: Possibly carcinogenic to humans G2A: Probably carcinogenic to humans ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail EU: European Union

Other Information:	This SDS is compiled based on the ingredient content and our company's existing knowledge, and is only used as a guide. The user of this SDS must make independent judgments on the correctness and completeness of the content, determine its applicability according to the actual situation.
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