Material Safety Data Sheet

Issuing Date No data availabl Revision Date 1-Jan-2019 valid Date 31-Dec-2019 Revision

1. PRODUCT AND COMPANY IDENTIFICATION **Revision Number** 5

Product Name

Recommended Use

Valve Regulated Lead Acid Battery (Non-spillable)

Model

12V120AH/10HR

Supplier Address

Kaiying Power Supply & Electrical Equip Co.Ltd. Kaiying Industrial Area, Chengxiang Town, Anxi, Quanzhou, Fujian Province, China 362400

CN

Phone:86-595-68782266 Contact:Mrs Jane

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2. HAZARDS IDENTIFICATION

Emergency Overview

NOTE: Under normal conditions of battery use, internal components will not present a health hazard.

The following information is provided for battery acid and lead exposure that may occur during battery production or container break ageor under extreme heat conditions such as fire In case of rupture: Corrosive The product causes burns of eyes, skin and mucous membranes.

Appearance Black

Physical State Bonded, fibrous glass web, Solid.

Odor None

Potential Health Effects

Principle Routes of Exposure

Skin contact.

Acute Toxicity

Skin

Eyes

Corrosive to the eyes and may cause severe damage including blindness.

Causes burns.

Inhalation

Harmful by inhalation. Contact with moist mucous membranes of the respiratory system can

cause caustic condition resulting in burns.

Ingestion

Harmful if swallowed. Can burn mouth, throat, and stomach.

Chronic Effects

Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Avoid

repeated exposure.

Main Symptoms

Severe exposures can lead to shock, circulatory collapse, and death Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting,

constipation, sleep disturbances and overall weakness

Aggravated Medical

Conditions

None known.



See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	Weight %	CAS No	Air E	Air Exposure Limits(μg/m³)		
Name			ACGIH TLV	OSHA	NIOSH	(mg/kg)
Lead	57	7439-92-1	150	30	10	500
Lead Oxide	22	1309-60-0	1000	1000	1000	2.14
Electrolyte (Sulfuric Acid)	14	7664-93-9	1	1	1	ш
Battery Pack	7	9003-56-9	11	1	1	

4. FIRST AID MEASURES

General Advice First aid is upon rupture of sealed battery.

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the

eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water

removing all contaminated clothes and shoes.

Inhalation Move to fresh air. Call a physician or Poison Control Center immediately. If not breathing, give

artificial respiration. If breathing is difficult, give oxygen.

Ingestion Immediate medical attention is required. Call a physician or Poison Control Center

immediately. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to

an unconscious person. Remove from exposure, lie down.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.

Flash Point Not determined.

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Uniform Fire Code Corrosive: Acid-Liquid

Toxic: Solid

Hazardous Combustion Products

Hazardous metal fumes and oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes.

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

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.



NFPA Health Hazard 3 Flammability 0 Stability 2 Physical and Chemical Hazards -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Do not touch damaged containers or spilled material

unless wearing appropriate protective clothing. Do not get in eyes, on skin, or on clothing.

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

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

Methods for Cleaning Up In case of rupture: Use personal protective equipment. Dam up. Soak up with inert absorbent

material. Take up mechanically and collect in suitable container for disposal. Clean

contaminated surface thoroughly.

Other Information Refer to protective measures listed in Sections 7 and 8.

7. HANDLING AND STORAGE

Handling In case of rupture: Wear personal protective equipment. Handle in accordance with good

industrial hygiene and safety practice. Avoid contact with skin and eyes.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m ³	TWA: 50 ŵg/m ³	IDLH: 100 mg/m ³
7439-92-1	Ü	Action Level: 30 ŵg/m³ Poison, See	TWA: 0.050 mg/m ³
		29 CFR 1910.1025	
Sulfuric acid	TWA: 0.2 mg/m3 thoracic fraction	TWA: 1 mg/m ³	1DLH: 15 mg/m ³
7664-93-9		(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³

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-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Engineering Measures Showers

Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection
Skin and Body Protection
Respiratory Protection
Tightly fitting safety goggles.
Wear protective gloves/clothing.
No protective equipment is need

No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Odor Threshold No information available No information available

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Flash Point **Decomposition Temperature**

Melting Point/Range

Flammability Limits in Air

Water Solubility **Evaporation Rate Vapor Density**

No information available. No information available No information available

Immiscible in water No information available

No information available

No data available

Odor

Physical State

None.

Bonded, fibrous glass web Solid

Autoignition Temperature

Boiling Point/Range

No information available No information available

No information available No information available

No data available

Explosion Limits

Solubility

Vapor Pressure

Partition Coefficient: n-

octanol/water

10. STABILITY AND REACTIVITY

Stability

Stable under recommended storage conditions.

Incompatible Products

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Conditions to Avoid

Exposure to air or moisture over prolonged periods.

Hazardous Decomposition

Products

Thermal decomposition can lead to release of toxic/corrosive gases and vapors

Hazardous Polymerization

Hazardous polymerization does not occur,

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

In case of rupture:

LD50 Oral VALUE

8699.186 mg/kg (rat) estimated

LC50 Inhalation (DUST) VALUE

4.1463 mg/L (mist) (dust) mg/m3 estimated

Chronic Toxicity

Chronic Toxicity

Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Avoid

repeated exposure.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Lead	A3	Group 2A	Reasonably Anticipated	X
Sulfuric acid	A2	Group 1	Known	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen



OSHA: (Occupational Safety & Health Administration)

Reproductive Toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.

Developmental Toxicity Contains ingredients that have suspected developmental hazards

Target Organ Effects Blood. Reproductive system. Damage to fetus possible Central nervous system (CNS). Eyes.

Gastrointestinal tract (GI). Gingival Tissue. Kidney. Respiratory system. Skin. Teeth.

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead		LC50: 0.44 mg/L (96 h semi-		EC50: 600 Aµg/L (48 h)
		static) Cyprinus carplo		water flea
		LC50: 1.17 mg/L (96 h flow-		
		through) Oncorhynchus		
		mykiss		
		LC50: 1.32 mg/L (96 h static)		
		Oncorhynchus mykiss		
Sulfuric acid		LC50; > 500 mg/L (96 h		EC50: 29 mg/L (24 h)
		static) Brachydanio rerio		Daphnia magna

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261). Should not be released into the environment.

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number D002 D008

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Lead - 7439-92-1		Included in waste streams:	= 5.0 mg/L regulatory level	
Lead - 7439-92-1	(hazardous constituent - no		= 5.0 mg/L regulatory level	
	waste number)	F035, F037, F038, F039,		
		K002, K003, K005, K046,		
		K048, K049, K051, K052,		
		K061, K062, K064, K065,		
		K066, K069, K086, K100,		
	1	K176		

California Hazardous Waste Codes 792

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

Chemical Name	California EHW	California Carc	California Hazardous Waste	California Waste - Part 2
Lead			Toxic	TCLP (for CA Toxicity): 5.0 mg/L
Sulfuric acid			Toxic Corrosive	



UN No.	Transportation Information shipping name	Class	Special Provision	
2800	Batteries, Wet, Non-spillable, Electric storage	8	238	

LONGWAY batteries are Non-spillable batteries. They meet the requirements of Special Provision 238.

The substance is not subject to IMO IMDG Code according to the special provision 238.

U.S. DOT:

DOT-Our Non-spillable batteries are Not subject to DG regulations, since they meet the requirements of 49 CFR 173.159(d). They do not have an assigned UN number nor do they require additional DOT hazard labeling.

IATA / ICAO:

IATA/ICAO- LONGWAY batteries are exempt from DG regulations, and classified as a "Non-Spillable battery". Our Non-spillable batteries are Not subject to DG regulations, since they meet the requirements of Packing Instructions 872 of Special Provision A67. The LONGWAY batteries are securely packaged, protected from short circuits and labeled "Non-Spillable". They are good for transportation on either passenger aircraft or cargo aircraft.

For all modes of transportation, each battery and outer package must be labeled:

"Non-Spillable" or "Non-Spillable Battery". This label must be visible during transportation.

IMDG:

LONGWAY batteries are Non-spillable batteries. They are not subject to the IMO International Maritime Dangerous Goods code (2016 edition) according to the Special Provision 238.

DOT	NOT REGULATED
TDG	Not regulated
MEX	Not regulated
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated (as a Hazardous Material)

15. REGULATORY INFORMATION

International Inventories

TSCA DSL Complies
Not determined

U. S. 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	CAS-No	Welght %	SARA 313 - Threshold Values %
Lead	7439-92-1	60-100	0.1
Sulfuric acid	7664-93-9	15-40	1.0

SARA 311/312 Hazard Categories

Yes
Yes
No
No
No

Clean Water Act

This product contains 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 Quantitles	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead		X	X	
Sulfuric acid	1000 lb			X

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Lead	7439-92-1	60-100				

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Ī	Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
-	Lead	10 lb	
- 1	Sulfuric acid	1000 lb	1000 lb

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Lead	7439-92-1	Carcinogen
		Developmental
		Female Reproductive
		Male Reproductive
Sulfuric acid	7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Lead	X	X	X	X	X
Copper	X	X	X	X	X
Calcium	X	X	X		
Sulfuric acid	X	X	X	X	X

International Regulations

Mexico - Grade

Minimum risk, Grade 0



Chemical Name	Carcinogen Status	Exposure Limits
Lead	A3	Mexico: TWA= 0.15 mg/m ³
Copper		Mexico: TWA= 1 mg/m³ Mexico: TWA= 0.2 mg/m³ Mexico: STEL= 2 mg/m³
Sulfuric acid	A2	Mexico: TWA 1 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials E Corrosive material D1B Toxic materials



Chemical Name	NPRI
Lead	X
Sulfuric acid	X

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Proper Shipping Name: BATTERIES, WET NON-SPILLABLE ELECTRIC STORAGE

UN Number:

UN2800

Hazard Class:

Class 8

Packing Group:

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Prepared By

(LONGWAY battery)Kaiying Power Supply & Electrical Equip Co., Ltd

Kaiying Industrial Area, Chengxiang Town , Anxi, Quanzhou, Fujian Province , China

Revision Date

1-Jan-2019

Revision Note

No information available

General Disclaimer

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End of Safety Data Sheet

