

Wuhan Vution Lithium Power Technology Co. Ltd

Add:24th Floor,Optics Valley Dingchuang International,Optics Valley Rare Eco Industrial Park,Wuhan,Hubei Province,China

MATERIAL SAFETY DATA SHEET

SECTION 1:Chemical Product & Company Information

Manufacturer's Name: Wuhan Vution Lithium Power Technology Co. Ltd	Phone Number: +86 27 5952 3598
Address:24th Floor,Optics Valley Dingchuang International,Optics Valley Rare Eco Industrial Park,Wuhan,Hubei Province,China	Version: 2.0
Name:VRLA Lead-Acid Battery VT12-20AH 12V20AH	RELEASE DATE:20/01/2023

SECTION 2: Composition/Information on Ingredients

COMPONENTS PERCENT OSHA ACGIH OTHER LIMITS CAS NUMBER

Hazardous Components PEL TLV 1% or greater,Carcinogens 0.01 % or greater

C.A.S	PRINCIPAL COMPONET(S) (CHEMICAL & COMMON NAME(S))	Component percentage	ACGIH TLV-mg/m ³	OSHA PEL/TWA-mg/m ³
7439-92-1	Metallic Metal Alloy	25.5%	0.05 mg/m ³	0.05 mg/m ³
7439-92-1	Lead Sulfates	18.2%	0.05 mg/m ³	0.05 mg/m ³
7439-92-1	Lead Oxides	18%	0.05 mg/m ³	0.05 mg/m ³
7664-93-9	Sulfuric Acid (H2SO4)	5.2%	1.0 mg/m ³	1.0 mg/m ³
	Polypropylene case MTL	6.4%		
	Separators	3.5%		
	Water	19.2%		
	Terminal	1.5%		
	Sealing ring	2.5%		

SECTION 3: Hazards Identification

- Flash Point: Not Combustible NFPA WARNING: 1
- Auto Ignition Temperature N/A Flammability Limits in Air % by Volume: N/A
- Extinguishing Media: Dry Chemical Carbon Dioxide, Water Fog, Water
- Special Fire Fighting Procedures: Sulfuric Acid Fumes, Sulfur Dioxide Gas or Carbon Monoxide may bereleased when acid decomposes. Wear NIOSH approved self contained breathing apparatus.
- Unusual Hazards: Water applied to sulfuric acid generates heat and causes acid to spatter. Wear full-cover acid resistant clothing. Sulfuric acid reacts violently with metals, nitrates,chlorates, carbides, fulminates,picrates and other organic materials. Reacts with most metals to yield explosive/flammable hydrogen gas.This reaction is intensified when sulfuric acid is diluted with water to form battery electrolyte.

SECTION 4: First Aid Measures

Emergency and First Aid Procedures	
1.Inhalation	Remove to fresh air and provide medical oxygen/CPR if needed.Obtain medical attention.
2.Eyes	Immediately flush with water for at least 15 minutes,hold eyelids open. Obtain medical attention.
3.Skin	Flush contacted area with large amounts of water for at least 15 minutes. Remove contaminated clothing and obtain medical attention if necessary.
4.Ingestion	Do not induce vomiting .If conscious drink large amounts of water/milk. Obtain medical attention.

SECTION 5: Fire Fighting Measures

- Put or fire with dry sands,CO2
- To avoid risk of fire or explosion ,keep sparks or other sources of ignition away from batteries
- Do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries.
- Follow manufacture ' s instructions for installation and service.



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SECTION 6: Accidental Release Measures

Procedures for Cleanup: Avoid contact with any spilled material. Contain spill. isolate hazard area, and deny entry. Limit site access to emergency responder. Neutralize with sodium bicarbonate, soda ash, lime or other neutralizing agent. Place battery in suitable container for disposal. Dispose of contaminated material in accordance with applicable local, state and federal regulations. Sodium bicarbonate, soda ash, sand, lime or other neutralizing agent should be kept on-site for spill remediation.

Personal Precautions: Acid resistant aprons, boots and protective clothing. ANSI approved safety glasses with side shields/face shield recommended.

Environmental Precautions: Lead and its compounds and sulfuric acid can pose a severe threat to the environment. Contamination of water, soil and air should be prevented.

SECTION 7: Handling and Storage

Store away from reactive materials. open flames and sources of ignition as defined in Section 10-Stability and Reactivity Date. Store batteries in cool, dry, well-ventilated areas. Batteries should be stored under roof for protection against adverse weather conditions. Avoid damage to containers.

SECTION 8: Exposure Controls/Personal Protection

Respiratory Protection: Sulfuric Acid Mist-Mask with filter approved for acid mist.

Ventilation: Local exhaust: Room air change four times per hour.

Protective Gloves: Rubber

Eye Protection: Goggles, Face Shield

Other Protective Equipment: Rubber Apron, Acid Resistant Clothing Recommended

Work Hygienic Practices: Wash thoroughly after handling

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Components、Density、Melting Point、Solubility、(in H₂O) Odor Appearance

Lead / 11.34 327.4°C / None / None / Silver-Gray Metal

Lead Sulfate / 6.2 1170°C / 40 mg/l (15°C) / None / White Powder

Lead Dioxide / 9.4 290°C / None / None / Brown Powder

Sulfuric Acid / About 1.3(25°C) / About 114oC (Boiling) 100% Acidic/ Clear Colorless Liquid

Fiberglass Separator / None / None / Slight Toxic White Fibrous Glass Membrane

Container (ABS or PP) / None / None / None / Odor Solid Plastics

SECTION 10: STABILITY AND REACTIVITY

Stability: stable	Conditions to Avoid: Avoid overcharging and smoking, or sparks near battery surface. High temperatures-cases decompose at >320° F
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Incompatibility (Materials to Avoid)	Sparks, open flames, keep battery away from strong oxidizers.
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11: TOXICOLOGICAL INFORMATION

HEALTH HAZARDS - Acute: Eyes, Skin, Respiratory System & Digestive System

Chronic: Eyes, Skin, Respiratory System & Digestive

System Signs and Symptoms of Exposure: Irritation of Exposed Area, Burns, and Respiratory Problems
No possibility of over exposure of lead will occur unless battery is destroyed.

MEDICAL CONDITIONS GENERALLY: Aggravated by Exposure: Exposure to mist may cause lung damage & aggravate pulmonary conditions.



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SECTION 12: ECOLOGICAL INFORMATION

All care should be taken to protect the environment from any adverse impact by stationary batteries or from the batteries ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

Stationary sealed battery are restricted land disposal objects. All spent batteries should be properly Recycled to a permitted Secondary Lead Smelter.

All battery parts should be properly recycled.

No whole spent lead-acid battery should be land-filled or placed in house hold garbage.

SECTION 14 : TRANSPORT INFORMATION

Proper shipping name : Valved Regulated Sealed Lead Acid battery

Our batteries have passed vibration,pressure differential and free flowing acid tests,This product is not dangerous product not subject to IMO IMDG Code and IATA DGR.according to special provision 238 and special provision A67 its package and transport conforms to the requirement of sea and air transport.

Not regulated by IMO IMDG and IATA DGR

YES

Not classified by IMO IMDG and IATA DGR

YES

Not applicable by IMO IMDG and IATA DGR

YES

Not dangerous cargo according to IMO IMDG and IATA DGR

YES

SECTION 15 : REGULATORY INFORMATION

REGULATORY INFORMATION: Those ingredients in stationary sealed batteries listed above are not subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Re-authorization Act, if the sealed batteries are in storage and have no potential to leak.

SECTION 16 : Other Information

SPS Batteries having met the related conditions are EXEMPT from hazardous goods regulations for the purpose of transportation by DOT, and IATA/ICAO, and therefore are unrestricted for transportation by any means. For all modes of transportation, each battery outer package is labeled "NON-SPILLABLE".Validity period 5years.

Validity period 5years(2023/01/20--2028/01/20)

