



Material Safety Data Sheet

For

NINGBO YIMI ELECTRICAL APPLIANCE CO.,LTD.

AREA INDUSTRY OF LIANSHAN YUYAO CITY ZHEJIANG CHINA

And for their product

Valve Regulated Lead Acid Battery

Laboratory : Sitek Technology Co.,Ltd.

Address : Jiangnan Road,Ningbo National Hi-tech Zone,Ningbo 315040,China.

Signed for and on behalf of


Hebin Chen/ Technical Director
July 27th,2023

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Material Safety Data Sheet

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

1.1. Product identifier

Trade name: Valve Regulated Lead Acid Battery.

Proper shipping name: Lead and lead oxide, SOLID.

Other means of identification: No data available

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant identified uses

Used batteries.

1.2.2.Uses advised against

1.3. Details of the shipper of the safety data sheet

Supplier:	Ningbo Yimi Electrical Appliance Co.,Ltd
Address:	Area Industry of Linshan,Yuyao City,Zhejiang,China.
Telephone:	+86- 0574-62067996
Fax:	+86- 0574-62059177
E-mail:	COMPANY@SUNHON.COM

1.4. Emergency telephone number

Country	Advisory body	Emergency number
China	Ningbo Yimi Electrical Appliance Co.,Ltd.	+86- 0574-62067996

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Category	Exposure Route
Skin Corrosive	1A	-
Acute Toxicity(Oral)	4	-
Acute Toxicity(Inhalation)	4	-
Chronic Aquatic	2	-

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Classification according to Directive 67/548/EEC or 1999/45/EC

Risk codes	Risk phrases
R34	Causes burns.
R20/22	Harmful by inhalation and if swallowed.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other adverse physicochemical, human health and environmental effects

No reliable data available.

2.2. Other hazards

No reliable data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical ingredient	Molecular formula	Content (about)	CAS No.
Lead and lead oxide	Pb, PbO ₂	60-70	7439-92-1,1309-60-0
Calcium	Ca	<0.15	7440-70-2
Tin	Sn	<1	7440-31-5
Sulfuric acid	H ₂ SO ₄	10-15	7664-93-9
ABS	-	5-10	9003-56-9
AGM separator	-	3-4	-

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

Advice for the doctor: Symptomatic treatment.

4.2. Most important symptoms and effects, both acute and delayed

Harmful by inhalation and if swallowed; Causes burns;

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

4.3. Indication of any immediate medical attention and special treatment needed

No reliable data available.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Foam.

Dry chemical powder.

Carbon dioxide.

Water spray or fog - large fires only.

5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: Emits toxic fumes under fire conditions.

Characteristics of Hazard :Toxic fumes; gases or vapors may evolve on burning.

Hazardous Combustion Products:CO, CO₂, acid, hydrogen and oxygen gas

Fire-extinguishing Methods and Extinguishing Media,Carbon dioxide, dry chemical powder, or appropriate foam.

Attention in Fire-extinguishing:The Firemen should put on antigas masks and full fire-fighting suits.

5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

Cool fire exposed containers with water spray from a protected location.

Only when safe to do so, remove containers from path of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Wear suitable protective equipment.

6.1.2. For emergency responders

Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in suitable container for recovery or disposa.

6.4. Reference to other sections

Refer to Section 8 for Personal Protective Equipment advice.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements. don't handling the batteries in manner that allows terminals to short circuit

7.2. Conditions for safe storage, including any incompatibilities

Suitable container: Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.

Storage incompatibility: Avoid reaction with strong acid, alkali and oxidizing agents.

Store and used far away from heat, sparks, open flame, or other heat ignition sources, and under room temperature(<30°C) in ventilating and dehumidifying environments

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

At this time no TLV of this mixture has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as practically possible and occupational exposure must be kept to a minimum.

Substance	PbO2			
CAS No.	1309-60-0			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m3	ppm	mg/m3
Austria		2 inhalable aerosol		
Belgium				2
Canada - Québec				2(1)
Denmark		2		2
European Union				
France				2
Hungary		2		2
Poland		0.5		1
Singapore				
Spain				
Sweden		1		(2)
Switzerland		2 inhalable aerosol		
USA - NIOSH				2(1)
United Kingdom				2

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Substance	H2SO4			
CAS No.	7664-93-9			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m3	ppm	mg/m3
Belgium		2		
Canada - Québec		2		
Denmark		2.5 respirable aerosol		5 respirable aerosol
France		2 respirable aerosol		
Germany (DFG)		4 inhalable aerosol		
		1,5 respirable aerosol		
Singapore		2 respirable aerosol		
Spain		2 inhalable aerosol		
Sweden		5 inhalable aerosol		
Switzerland		5 inhalable aerosol		
		2,5 respirable aerosol		
USA - NIOSH		2,5 (1)		
USA - OSHA		15 total dust		
		5 respirable dust		
United Kingdom		10 inhalable aerosol		
		4 respirable aerosol		

8.2. Exposure controls

Appropriate engineering controls: Process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

General Personal Protection: Safety goggles or face shield, protective chemical resistant gloves, protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	No data available
Odour:	No data available
Oduour threshold	No data available
pH:	No data available
Melting point:	>300
Boiling point:	No data available

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Flash point:	No data available
Evapotation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability:	No data available
Explosive limits:	No data available
Vapour pressure:	No data available
Relative density:	No data available
Solubility(ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available

9.2. Other information EN L 133/22 Official Journal of the European Union 31.5.2010

No additional data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 7.2

10.2. Chemical stability

Stable under normal condition

10.3. Possibility of hazardous reactions

See section 7.2

10.4. Conditions to avoid

Heat, sparks, flames, elevated temperatures, Contact with incompatible materials.

10.5. Incompatible materials

See section 7.2

10.6. Hazardous decomposition products

Thermal decomposition products: carbon monoxide and carbon dioxide gases.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity:	Lead Dioxide
Skin corrosion/irritation:	Lead Dioxide: Skin irritation
Serious eye damage/irritation:	Sulfuric Acid:Eye irritation: highly corrosive
Respiratory or skin sensitisation:	Sulfuric Acid: sensitising
Carcinogenicity:	No data available
Reproductive toxicity:	No data available

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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

12.1. Toxicity

Acute (short-term) toxicity:

Sulfuric Acid:

Fish (Oncorhynchus mykiss, 96h): LC50 > 100(% v/v saturated solution) OECD Guideline 203

Crustacea(Daphnia Magna, 48h): EC50 > 0.0735 mg/l (OECD TG 202)

Algae/aquatic plants (Desmodesmus subspicatus, 72h): EC50 > 100 other: v/v saturated solution

12.2. Persistence and degradability

Abiotic Degradation: No data available

Physical- and photo-chemical elimination: No data available

Biodegradation: No data available

12.3. Bioaccumulative potential

LEAD: The toxic effects of lead are accumulative and slow to appear. It affects the kidneys, reproductive, and central nervous system

12.4. Mobility in soil

Known or predicted distribution to environmental compartments: No data available

Surface tension: No data available

Adsorption/Desorption: No data available

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: Refer to specific national regulation.

Contaminated packaging: Contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Land transport (ADR / RID / GGVSE)

14.1. UN number : UN2800

14.2. UN proper shipping name : Batteries,wet,Non-spillable

14.3. Transport hazard class(es) : 8

14.4. Packing group : III

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- 14.5. Environmental hazards : Corrosive
- 14.6. Special precautions for user : No data available

Air transport (ICAO-IATA / DGR)

- 14.1. UN number : UN2800
- 14.2. UN proper shipping name : atteries,wet,Non-spillable
- 14.3. Transport hazard class(es) : 8
- 14.4. Packing group : III
- 14.5. Environmental hazards : Corrosive
- 14.6. Special precautions for user : No data available

Sea transport (IMDG-Code / GGVSee)

- 14.1. UN number : UN2800
- 14.2. UN proper shipping name : atteries,wet,Non-spillable
- 14.3. Transport hazard class(es) : 8
- 14.4. Packing group : III
- 14.5. Environmental hazards : Corrosive
- 14.6. Special precautions for user : Limited Quantities 1L

Inland waterways transport (ADNR / River Rhine)

- 14.1. UN number : UN2800
- 14.2. UN proper shipping name : atteries,wet,Non-spillable
- 14.3. Transport hazard class(es) : 8
- 14.4. Packing group :III
- 14.5. Environmental hazards : Corrosive
- 14.6. Special precautions for user : No data available
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

15.1.2. International/National regulations

UN Transport of Dangerous Goods.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

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SECTION 16: Other information

16.1 Indication of changes

No data available

16.2 Key literature references and sources for data

- ESIS (European chemical Substances Information System), <http://esis.jrc.ec.europa.eu/>
- REACH registered chemicals, http://echa.europa.eu/chem_data_en.asp
- IFA GESTIS - International limit values for chemical agents - occupational exposure limits (OELs), http://www.dguv.de/ifa/en/gestis/limit_values/index.jsp

16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Chronic Aquatic Category 2	Calculation method
Skin Corrosive Category 1A	Calculation method
Acute Toxicity(Oral) Category 4	Calculation method
Acute Toxicity(Inhalation) Category 4	Calculation method

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation.

Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

End of the report

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