Material Safety Data Sheet

LEAD ACID BATTERY, WET

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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name LEAD ACID BATTERY, WET

Company name SEALED PERFORMANCE BATTERIES

Address 1 Ant Road Yatala OLD AUSTRALIA

Emergency Tel. 1-619-661-2020

Telephone/Fax Number Tel: +61 (0) 7 3386 1102

Recommended Use Starting, lighting, ignition for car, truck, etc

Other Names

Name

Battery, Wet, Filled with Acid, Electric Storage

Additional Information

Manufacturers Product Code: Battery, Automotive

2. HAZARD IDENTIFICATION

Hazard Classification

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC). Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Risk Phrase(s)

R33 Danger of cumulative effects.

R35 Causes severe burns.

R58 May cause long term adverse effects in the environment.

R62 Possible risk of impaired fertility.

R61(1) May cause harm to the unborn child

R20/22 Harmful by inhalation and if swallowed.

Safety Phrase(s)

S1/2 Keep locked up and out of reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S30 Never add water to this product.

S45 In case of accident or if you feel unwell seek medical advice immediately (show the label whenever possible).

S53 Avoid exposure - obtain special instructions before use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization

Liquid

Ingredients

Name	CAS	Proportion
Lead	7439-92-1	30-60 %weight
Sulphuric Acid	7664-93-9	20-40 %weight
Lead dioxide	1309-60-0	10-30 %weight

4. FIRST-AID MEASURES

Inhalation

Sulphuric acid – Apply artificial resuscitation and seek immediate medical assistance if not breathing. Lead compounds – Gargle, wash nose and lips, seek immediate medical assistance.

Ingestion

Sulphuric acid – Do not induce vomiting. Give a glass of water. Seek immediate medical assistance.

Skin

Remove contaminated clothing and wash skin thoroughly with water. Seek medical assistance if symptoms persist.

Eye

Sulphuric acid – Irrigate with water for 15 minutes. Seek immediate medical assistance.

First Aid Facilities

Access to a sufficient supply of potable water may be necessary.

Advice to Doctor

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Hazards from Combustion Products

Sulphuric acid may decompose to sulphur trioxide, carbon monoxide, sulphuric acid mist, sulphur dioxide and hydrogen. Exposure of lead compounds to high temperatures are likely to produce toxic metal fume, contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas. Exposure of plastic container and components to high temperatures may produce carbon dioxide, carbon monoxide, noxious aldehydes (eg. formaldehyde and acrolein), ketones, methane and ethane.

Specific Methods

Use Carbon Dioxide or Dry Chemical extinguishers. Firefighters to wear acid-resistant full protective clothing, including rubber footwear and self-contained breathing apparatus. Water (fine spray or fog) should not be used unless from a safe distance due to vigorous and exothermic reaction which will result.

Hazchem Code

2W

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Wear personal safety equipment at all times as detailed in "Personal protection". Establish a hazard zone. Bund and neutralise liquid with Soda Ash or Sodium Bicarbonate. Slowly pour neutralising powder from the outside of the spill inwards. Continue until the entire spill is covered. Wait until the reaction is complete. Absorb excess liquid with dry earth, sand or a similar material.

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

Workplace Exposure Standard for Metallic Lead is 0.15 mg/m³ in air. Workplace Exposure Standard for Sulphuric acid is 1 mg/m³ in air.

Engineering Controls

Use only in a well ventilated area.

Respiratory Protection

Not applicable under normal use.

Eye Protection

When handling Sulphuric acid, wear chemical goggles/face shield.

Hand Protection

When handling Sulphuric acid, wear impervious PVC acid resistant gloves with elbow length gauntlet. When handling lead, wear leather or similar type work gloves.

Body Protection

When handling batteries, wear safety boots.

Hygiene Measures

Batteries are heavy, appropriate material handling equipment and techniques should be used. Handle batteries cautiously to avoid spills. Ensure vent caps are on securely. Avoid contact with internal components. Wear protective clothing when filling batteries as detailed below in "Personal Protection". Follow manufactures instructions for installation and service.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

The battery is a manufactured article. The sulphuric acid electrolyte is a clear, mobile liquid. (Sulphuric Acid Electrolyte)

Melting Point (Sulphuric Acid Electrolyte) -7 to -70°C

Boiling Point (Sulphuric Acid Electrolyte) 95°C

Solubility in Water (Sulphuric Acid Electrolyte) 100%

Specific Gravity

(Sulphuric Acid Electrolyte) 1.2 to 1.3 @ 25°C

Vapour Pressure

(Sulphuric Acid Electrolyte) 13 to 22 mmHg @ 25°C

Flash Point

(Sulphuric Acid Electrolyte) Not Applicable

Flammability

Under some operating conditions or Sulphuric acid contact with most common metals, flammable hydrogen gas can be liberated, it is recommended that 2% hydrogen concentration is not exceeded. Do not use close to ignition sources. Use in a well ventilated area.

Flammable Limits - Lower

(Sulphuric Acid Electrolyte) Not Applicable

Flammable Limits - Upper

(Sulphuric Acid Electrolyte) Not Applicable

Other Information

Sulphuric Acid: Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulphur trioxide gas, strong oxidisers and water. Contact with metals may produce toxic sulphur dioxide fumes and may release flammable hydrogen gas.

Lead Compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen and reducing agents.

10. STABILITY AND REACTIVITY

11. TOXICOLOGICAL INFORMATION

Inhalation

Sulphuric acid - Breathing of vapours or mists may cause respiratory irritation.

Lead compounds - Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs.

Ingestion

Sulphuric acid - Corrosive and causes severe burns. May cause severe irritation of mouth, throat, oesophagus and stomach. Lead compounds - Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhoea and severe cramping.

Skin

Sulphuric acid - Severe irritation, burns and ulceration. Lead compounds - Not readily absorbed through the skin.

Eye

Sulphuric acid - Severe irritation, burns, comea damage, blindness. Lead compounds - May cause eye irritation.

Chronic Effects

Sulphuric acid: Possible erosion of tooth enamel, inflammation of nose, throat and bronchial tubes. Evidence available indicates exposure to strong inorganic acid mists containing sulphuric acid is carcinogenic to humans. (World Health Organisation: IARC. Copy draft report "Acid Toxicology" File, Chem. Prods NW Registry.) This classification does not apply to sulphuric acid solutions or to electrolyte in batteries.

Lead compounds: May cause constipation, weight loss, anaemia, fatigue, kidney damage, pain in joints, neuropathy (particularly of the motor nerves) and reproductive changes in male and female.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Refer to the local waste disposal authority for disposal of lead compounds, sulphuric acid and spent soda ash/sodium bicarbonate. Spent batteries should be sent to a secondary lead smelter for recycling.

14. TRANSPORT INFORMATION

U.N. Number 2794 Proper Shipping Name BATTERIES, WET, FILLED WITH ACID

DG Class 8 Packing Group III Hazchem Code

2W

Storage and Transport

This product contains a Scheduled Poison (S6) and must therefore be stored, maintained and used in accordance with the relevant State Poisons Act. At all times store away from explosives, "dangerous when wet" substances, foodstuffs, oxidisable materials, organic peroxides, radioactive substances, combustible materials and sources of ignition. Check regularly for spills and leaks. Store batteries in cool, dry, well ventilated areas with adequate containment in the event of spills. The Australian Dangerous Goods Code defines battery transport requirements in Australia.

EPG Number

8A1

IERG Number

37

15. REGULATORY INFORMATION

Regulatory information

Classified as hazardous according to criteria of NOHSC

HAZARDOUS SUBSTANCE. SCHEDULED POISON.

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC). Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S6

Hazard Category Toxic,Harmful,Corrosive

16. OTHER INFORMATION

Contact Person/Point

Technical Manager: (07) 3386 1102

User Codes

User Title Label	User Codes
Wis Numbers	03261475

Other Information

This SDS has been transcribed into Infosafe NOHSC format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF MSDS

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