

Safety Data Sheet

1. Product Identification:

- 1) Product Name: Valve Regulated Lead Acid (VRLA) Batteries – Batteries, wet, non-spillable electric storage.
- 2) Distributor/Manufacturer Name: EaglePicher Technologies LLC
 Commercial Power Solutions
 3001 S Davis Blvd.
 Joplin MO 64804
 Phone: 800-201-0215
 417-625-1116
- 3) Emergency Phone: Chemtrec: 800-424-9300
 International: 703.527.3887

2. Hazard Identification:

Signs and Systems of Exposure

1. Acute Hazards:

Do not open battery. Avoid contact with internal components. Internal components include lead and absorbed electrolyte.

Electrolyte: Electrolyte is corrosive and contact may cause skin irritation and chemical burns. Electrolyte causes severe burns of nose and throat. Ingestion can cause severe burns and vomiting.

Lead: Direct skin or eye contact may cause local irritation. Inhalation or ingestion of lead dust or fumes may result in headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia and leg, arm and joint pain.

2. Sub Chronic and Chronic Health Effects:

Electrolyte: Repeated contact with electrolyte causes irritation and skin burns. Repeated exposure to mist may cause erosion of teeth, chronic eye irritation and/or chronic inflammation of the nose, throat and lungs.

Lead: Prolonged exposure may cause central nervous damage, gastrointestinal disturbances, anemia, irritability metallic taste, insomnia, wrist drop, kidney dysfunction, and reproductive system disturbances.

Routes of Entry: Inhalation – YES Eye Contact – YES Ingestion – YES

3. Composition and Information on Ingredients:

C.A.S.	Principal Hazardous Component (s) (chemical & common name(s))	Hazardous category	% Weight	ACGIH TLV-mg/m ³
7439-92-1	Lead/Lead Oxide (litharge)/Lead Sulfate	Acute-Chronic	60-70	0.05mg/m ³
7440-70-2	Calcium (lead calcium alloy)	Reactive	<0.15	NA
7440-31-5	Tin	Chronic	<1	2
7440-38-2	Arsenic (inorganic)	Acute-Chronic	<1	0.01
7664-93-9	Sulfuric Acid (Battery Electrolyte)	Reactive-Oxidizer Acute-Chronic	10-15	1.0
NA	Inert ingredients	NA	<6	NA

4. First-aid measures:

Emergency and First Aid Procedures	Contact with internal components if battery is opened/broken.
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. Never give anything by mouth to an unconscious person.

5. Fire-Fighting Measures:

Extinguishing Media	Class ABC, CO ₂ , Halon
Special Fire Fighting Procedures	Full protective clothing and NIOSH approved self-contained breathing apparatus with full face shield. Extinguish fire with agent suitable for surrounding combustible materials. Cool exterior of battery if exposed to fire, to prevent or stop release of lead chemicals and fumes. The acid mist and vapors generated by runoff and dilution water may be toxic and corrosive.

6. Accidental Release Measures:

Not applicable under normal conditions. Avoid contact with any spilled material. Contain spill, isolate hazard area and deny entry. Limit site access to emergency responders.

STEPS TO TAKE IN CASE OF LEAKS OR SPILLS

If sulfuric acid is spilled from a battery, neutralize the acid with sodium bicarbonate (baking soda), sodium carbon (soda ash), or calcium oxide (lime). Flush the area with water; do not allow un-neutralized acid into the sewage system

7. Handling and Storage:

1. Store away from reactive materials, open flames and sources of ignition. Store in a cool, dry area in closed containers.
2. Store lead/acid batteries with adequate ventilation. Never recharge batteries in an unventilated space or remove vent covers.
3. Do not stack batteries in order to prevent damage to terminals.

8. Exposure Controls/Personal Protection:

Respiratory Protection: None required under normal conditions. Acid/gas NIOSH approved respirator is required when the PEL is exceeded or employee experiences respiratory irritation.

Ventilation: Store and handle in dry ventilated area.

Gloves: Wear rubber or plastic acid resistant gloves.

Safety Glasses: Chemical splash goggles or face shield are preferred, or ANSI approved safety glasses with side shields.

Footwear: Safety shoes are recommended when handling batteries.

Other: Safety shower and eyewash stations.

9. Physical and Chemical properties:

Boiling point – NA

Specific Gravity – 1.250-1.320pH<2

Melting point - >320°F (polypropylene)

Vapor Density – Hydrogen: 0.069 (air =1)

Electrolyte: 3.4 @ STP (air=1)

Vapor Pressure – NA

Percent Volatile by Volume - NA

Evaporation Rate – NA

Solubility – 100% soluble (electrolyte)

Reactivity in water – Electrolyte-water reactive (1)

Appearance and Odor –

Battery: Co-polymer polypropylene Solid: may be contained within an outer casing of aluminum or steel.

Lead: Gray, metallic, solid; brown/grey oxide

Electrolyte: Odorless, liquid absorbed in glass mat material

No apparent odor.

10. Stability and reactivity:

Stability: Stable

Incompatibility: Materials to Avoid - Sparks, open flames, keep batteries away from strong oxidizers.

Conditions to Avoid: overcharging as high temperatures can cause cases to decompose at >320°F.

Hazardous Decomposition Products: Combustion can produce carbon dioxide and carbon monoxide.

Hazardous Polymerization: NA

11. Toxicological Information:

General: The primary routes of exposure to lead are ingestion or inhalation of dust and fumes.

Acute: Inhalation/Ingestion: Exposure to lead and its compounds may cause headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia and pain in the legs, arms and joints.

Chronic: Prolonged exposure to lead and its compounds may cause damage to kidney and nervous system.

12. Ecological Information:

Hazardous Decomposition Products

1. Battery Electrolyte (Acid): Hydrogen, sulfur dioxide, and sulfur trioxide.
2. Lead/Lead Compounds: Oxides of lead and sulfur.

13. Disposal:

Neutralize spills as above and place in suitable container and dispose as hazardous waste. Do not allow acid into sewer. Return scrap batteries to a lead smelter in accordance with local, state and federal regulations. Contact local and/or state environment officials regarding disposal information.

14. Transport Information:

Batteries: UN2800, Wet, Non-Spillable, Electric Storage. Class 8, Packing Group II

DOT: Excepted from regulations, meets the requirements of 49 CFR 173.159

IATA/ICAO: Excepted from regulations, meets the requirements of Special Provision A48, A67, PI 872 (IATA 56th Edition)

IMDG: Excepted from regulations, meets the requirements in Special Provision 238.

Carefree Batteries having met the related conditions are exempt from hazardous good regulations for the purpose of transportation by DOT, IATA/ICAO, and IMDG, therefore are unrestricted for all modes of transportation. Each battery and outer package is labeled "Non-Spillable" or "Non-Spillable Battery" and packaged as to prevent short circuit.

15. Regulatory Information:

NA

16. Other Information

Updated: 10/21/2014