

EAST PENN manufacturing co., inc.

167677



Battery Wet, Filled With Acid 8 UN2794 PGIII

SECTION I

Manufacturer's name: East Penn Manufacturing Co. Inc.
Deka Road, Lyon Station, PA 19536

Telephone number for information: (215) 682-6361

Emergency telephone number: CHEMTREC: 1-800-424-9300
In Washington, D.C. or outside
continental U.S., call 1-202-483-7616

Date prepared: April 6, 1993

Signature of preparer (optional): _____

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous components Specific chemical identity; (Common name(s))	OSHA PEL	ACGIH TLV	Other limits recommended	%
Lead, CAS #7439921	0.05 mg/m ³	0.15 mg/m ³	n/a	43-70
Antimony, CAS #7440360	0.5 mg/m ³	0.5 mg/m ³	n/a	0-4
Sulfuric acid, CAS #7664939	1.0 mg/m ³	1.0 mg/m ³	n/a	20-44

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS (Sulfuric Acid)

Boiling point: approximately 235°F	Specific gravity (H ₂ O=1): 1.220-1.325
Vapor pressure (mm Hg.): 13	Melting point: not applicable
Vapor density (AIR=1): not applicable	Evaporation rate (Butyl Acetate=1): less than 1.0
Solubility in water: completely	Appearance and odor: clear, odorless, colorless

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point (method used): non-flammable Flammable limits: *hydrogen gas LEL: 4% UEL: 74%
Extinguishing media: Class ABC extinguisher, CO₂ and/or Halon

Special fire fighting procedures: Cool exterior of battery if exposed to fire to prevent rupture. The acid mist and vapors in a fire situation are corrosive. Wear special respiratory protection (SCBA) and clothing.

Unusual fire and explosion hazards: *Hydrogen gas, which may explode if ignited, is produced by this battery, especially when charging. Use adequate ventilation, avoid open flames, sparks, or other sources of ignition.

SECTION V - REACTIVITY DATA (Battery Case)

Stability: stable Condition to avoid: Cases decompose at 160-410°C (322-770°F)

Incompatibility (materials to avoid): Strong oxidizing agents such as hot nitric acid, etc.

Hazardous decomposition or by-products: Combustion can produce carbon dioxide (CO₂) and carbon monoxide (CO).

Hazardous polymerization: will not occur Conditions to avoid: not applicable

MSDS: Battery Wet Filled with Acid, 8 UN2794 PGIII

SECTION VI - HEALTH HAZARD DATA

Route(s) of entry: Inhalation, skin contact, and ingestion

Health hazards (acute and chronic): Short term exposure: Sulfuric acid may cause irritation of eyes, nose, and throat. Prolonged contact may cause severe burns. Long term exposure: Repeated contact 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 bronchial tubes.

TARGET ORGANS: respiratory system, eyes, skin and teeth

Carcinogenicity: not applicable

Signs and symptoms of exposure: Acid contact may cause irritation of eyes, nose and throat. Breathing of mist may produce respiratory difficulty. Contact with eyes and skin causes irritation and skin burns. Sulfuric acid is a CORROSIVE chemical.

Medical conditions generally aggravated by exposure: Pulmonary edema, bronchitis, emphysema, dental erosion, and tracheobronchitis

Emergency and first aid procedures:

- 1). Flush contacted area with large amounts of water for at least 15 minutes. Remove contaminated clothing and obtain medical attention.
- 2). If swallowed, give large volumes of water. DO NOT induce vomiting, obtain medical treatment.
- 3). Eyewash and shower stations should be made available.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled: SULFURIC ACID: Dilute spill cautiously with five to six volumes of water and gradually neutralize with sodium bicarbonate, soda ash or lime. When exposure level is not known, wear NIOSH approved positive pressure self-contained breathing apparatus. (Reference DOT UN2796)

Waste disposal method: Lead-acid batteries are completely recyclable. For information on returning batteries to East Penn for recycling, call (215) 682-6361.

Precautions to be taken in handling and storing: Store away from reactive material as defined in Section V, Reactivity Data.

Other precautions: Sodium bicarbonate, soda ash, sand or lime should be kept in same general area for emergency use. See Section IV on generation of hydrogen gas. If battery case is broken, avoid direct contact with internal components.

SECTION VIII - CONTROL MEASURES

Respiratory protection (specific type): Acid gas respirator required when PEL is exceeded or employee witnesses respiratory irritation. (See Section VI, Health Hazard Data)

Ventilation: (When charging in an enclosed area)
Local exhaust: preferred
Mechanical (general): acceptable at 1 to 4 air exchanges/hour
Special:
Other: local building/fire codes may require explosion proof fans and equipment.

Protective gloves: acid resistant (for example, rubber)
Eye protection: preferred
Other protective clothing or equipment: acid resistant aprons, boots and protective clothing
Work/hygienic practices: good personal hygiene and work practices are mandatory