


## 1. Identification

<b>Product identifier</b>	<b>Battery Fluid Acid</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Electrolyte for Industrial/Commercial electrical storage batteries.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer/Supplier</b>	East Penn Manufacturing Company, Inc.
<b>Address</b>	102 Deka Road, Lyon Station PA 19536
<b>Telephone number</b>	(610) 682-6361
<b>Contact person</b>	East Penn EHS Department
<b>Emergency telephone number</b>	USA/Canada: CHEMTREC (800) 424-9300, Outside USA 1 (703) 527-3887
<b>E-mail</b>	contactus@eastpenn-deka.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, single exposure	Category 1 (respiratory system)
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 1 (respiratory system)
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		

<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes severe skin burns and eye damage. May cause respiratory irritation. May cause cancer. Causes damage to organs (respiratory system). Causes damage to organs (respiratory system) through prolonged or repeated exposure. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Sulphuric acid	7664-93-9	30 - 43

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Inhalation** Move injured person into fresh air and keep person calm under observation. Get medical attention immediately.

**Skin contact** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

**Ingestion** Rinse mouth thoroughly with water. DO NOT induce vomiting because of danger of aspirating liquid into lungs. Get medical attention immediately.

**Most important symptoms/effects, acute and delayed** Causes severe burns. Exposure to mists may cause temporary irritation to eyes, skin, nose, throat, and upper respiratory tract.

**Indication of immediate medical attention and special treatment needed** Treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media** Dry chemical, foam, carbon dioxide.

**Unsuitable extinguishing media** Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

**Specific hazards arising from the chemical** Sulfur trioxide (corrosive and toxic). Risk of fire and explosion on contact with metals as a result of hydrogen formation. Containers may explode when heated.

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** Substance does not burn but will support combustion.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Wear appropriate personal protective equipment.

**Methods and materials for containment and cleaning up** Stop the flow of material, if this is without risk.  
Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.  
Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Neutralize the spilled material before disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal. Dispose of waste and residues in accordance with local authority requirements.

**Environmental precautions** Prevent runoff from entering drains, sewers, or streams.

### 7. Handling and storage

**Precautions for safe handling** Keep away from heat, sparks and open flame.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Protect containers from damage.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sulphuric acid (CAS 7664-93-9)	PEL	1 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sulphuric acid (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup>	Thoracic fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sulphuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide adequate ventilation. Provide easy access to water supply and eye wash facilities.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

#### Skin protection

**Other** Wear suitable protective clothing. Use of an impervious apron is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Gas mask with acid gas canister and high-efficiency particulate filter.

#### Thermal hazards

When material is heated, wear gloves to protect against thermal burns.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Clear, colorless liquid.

#### Physical state

Liquid.

#### Form

Sulfuric acid, liquid.

#### Color

Not available.

### Odor

Odorless.

### Odor threshold

Not available.

### pH

< 1

### Melting point/freezing point

Not available.

### Initial boiling point and boiling range

235.4 - 240.8 °F (113 - 116 °C)

### Flash point

Not available.

### Evaporation rate

< 1

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** 4 (as hydrogen gas)

**Flammability limit - upper (%)** 74 (as hydrogen gas)

### Vapor pressure

13 mm Hg

### Vapor density

Not available.

<b>Relative density</b>	1.2 - 1.3
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	100 %
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	932 °F (500 °C) (as hydrogen gas)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Do not allow water to get into container because of reaction.
<b>Incompatible materials</b>	Strong bases. Combustible organic materials. Finely divided metals. Strong oxidizers. Reducing agents.
<b>Hazardous decomposition products</b>	At elevated temperatures: Sulfur dioxide. Sulfur trioxide. Carbon monoxide. Sulfuric acid. Hydrogen sulfide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Mist or vapor may irritate the respiratory system. Difficulty in breathing. Inhalation of vapors or mists will likely result in mild to severe irritation of the nose, throat and lungs, depending on airborne concentration.
<b>Skin contact</b>	Causes severe skin burns.
<b>Eye contact</b>	Causes severe eye burns.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Exposure to liquid causes serious eye and tissue damage. May cause serious chemical burns to the skin. Inhalation of mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.

### Information on toxicological effects

**Acute toxicity** May be harmful if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Sulphuric acid (CAS 7664-93-9)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	2140 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin burns.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Due to lack of data the classification is not possible.	
<b>Skin sensitization</b>	Due to lack of data the classification is not possible.	
<b>Germ cell mutagenicity</b>	Due to lack of data the classification is not possible.	
<b>Carcinogenicity</b>	The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC category 1). This classification applies only to mists containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions.	

### IARC Monographs. Overall Evaluation of Carcinogenicity

Sulphuric acid (CAS 7664-93-9) 1 Carcinogenic to humans.

## NTP Report on Carcinogens

Sulphuric acid (CAS 7664-93-9)

Known To Be Human Carcinogen.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation. Causes damage to organs (respiratory system).
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs (respiratory system) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Chronic inhalation of sulfuric acid mist may increase the risk of lung cancer.

## 12. Ecological information

<b>Ecotoxicity</b>	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	Not persistent.
<b>Bioaccumulative potential</b>	Potential to bioaccumulate is low.
<b>Mobility in soil</b>	Potential for mobility in soil is very high.
<b>Other adverse effects</b>	None known.

## 13. Disposal considerations

<b>Disposal instructions</b>	Neutralize electrolyte/sulfuric acid. Avoid discharge into water courses or onto the ground. Dispose of in accordance with local regulations.
<b>Local disposal regulations</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>Hazardous waste code</b>	D002: Corrosive waste
<b>Waste from residues / unused products</b>	Avoid discharge into water courses or onto the ground.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN2796
<b>UN proper shipping name</b>	Battery fluid, acid
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	8
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	A3, A7, B2, B15, IB2, N6, N34, T8, TP2, TP12
<b>Packaging exceptions</b>	154
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	242

### IATA

<b>UN number</b>	UN2796
<b>UN proper shipping name</b>	Battery fluid, acid
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	8L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

<b>UN number</b>	UN2796
<b>UN proper shipping name</b>	BATTERY FLUID, ACID

**Transport hazard class(es)****Class** 8**Subsidiary risk** -**Packing group** II**Environmental hazards****Marine pollutant** No.**EmS** F-A, S-B**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

Hazardous Chemical Reporting Requirements apply when an Extremely Hazardous Substance is present at a facility in an amount equal to or exceeding 500 pounds or the Threshold Planning Quantity, whichever is lower per 40CFR370.10(a)(1)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Sulphuric acid (CAS 7664-93-9) Listed.

**SARA 304 Emergency release notification**

Sulphuric acid (CAS 7664-93-9) 1000 LBS

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Sulphuric acid	7664-93-9	1000	1000		

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Sulphuric acid	7664-93-9	30 - 43

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Sulphuric acid (CAS 7664-93-9)

**Safe Drinking Water Act (SDWA)** Not regulated.**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Sulphuric acid (CAS 7664-93-9) 6552

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Sulphuric acid (CAS 7664-93-9) 20 %WV

**DEA Exempt Chemical Mixtures Code Number**

Sulphuric acid (CAS 7664-93-9)

6552

**US state regulations****US. Massachusetts RTK - Substance List**

Sulphuric acid (CAS 7664-93-9)

**US. New Jersey Worker and Community Right-to-Know Act**

Sulphuric acid (CAS 7664-93-9)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Sulphuric acid (CAS 7664-93-9)

**US. Rhode Island RTK**

Sulphuric acid (CAS 7664-93-9)

**California Proposition 65****WARNING:** Cancer and Reproductive Harm. [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)  
orPROPOSITION 65 WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer.  
WASH HANDS AFTER HANDLING.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Sulphuric acid (CAS 7664-93-9)

Listed: March 14, 2003

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Sulphuric acid (CAS 7664-93-9)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 19-September-2017**Revision date** 08-January-2018**Version #** 02**List of abbreviations** LD50: Lethal Dose 50%.**References** IARC Monographs. Overall Evaluation of Carcinogenicity  
Registry of Toxic Effects of Chemical Substances (RTECS)**Disclaimer** The information in this SDS was obtained from sources which we believe are reliable, but no warranty or representation as to its accuracy or completeness is hereby given. Users should consider the information herein only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal, the safety and health of employees and customers and the protection of the environment.