

# Mallinckrodt

## Material Safety Data

Emergency Phone Number: 314-982-5000

### SULFURIC ACID 93%

#### PRODUCT IDENTIFICATION:

Synonyms: Oil of vitriol; Babcock acid

Formula CAS No.: 7664-93-9

Molecular Weight: 98.07

Chemical Formula:  $H_2SO_4$

Hazardous Ingredients: Not applicable.

#### PRECAUTIONARY MEASURES

**DANGER! CORROSIVE. LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. INHALATION MAY CAUSE LUNG DAMAGE.**

Do not get in eyes, on skin, or on clothing.

Do not breathe mist.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

This substance is classified as a POISON under the Federal Caustic Poison Act.

#### EMERGENCY/FIRST AID

In all cases call a physician. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. If swallowed, **DO NOT INDUCE VOMITING!** Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. SEE SECTION 5.

DOT Hazard Class: Corrosive Material

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Mallinckrodt makes no representations, or warranties, either express or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Mallinckrodt will not be responsible for damages resulting from use of or reliance upon this information.

Mallinckrodt, Inc., Science Products Division, P.O. Box M, Paris, KY 40361.

#### SECTION 1 Physical Data

Appearance: Colorless, oily liquid.

Odor: Odorless.

Solubility: Miscible with water - liberating much heat.

Boiling Point: 279°C (534°F).

Melting Point: -35°C (-31°F).

Specific Gravity: 1.835

Vapor Density (Air = 1): 3.4

Vapor Pressure (mm Hg): 1 @ 145.8 C (299.4 F).

Evaporation Rate: No information found.

#### SECTION 2 Fire and Explosion Information

##### Fire:

Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Reacts with most metals releasing flammable, potentially explosive hydrogen gas.

##### Explosion:

Not considered to be an explosion hazard under normal conditions.

##### Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

##### Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### SECTION 3 Reactivity Data

##### Stability:

Stable under ordinary conditions of use and storage.

##### Hazardous Decomposition Products:

Toxic fumes of oxides of sulfur. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas, and with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively.

##### Hazardous Polymerization:

Will not occur.

##### Incompatibilities:

Water, bases, organic material, halogens, metal acetylides, oxides and hydrides, strong oxidizing and reducing agents and many other reactive substances.

#### SECTION 4 Leak/Spill Disposal Information

Dike and cover leaking or spilled liquid with dirt, vermiculite, kitty-litter or other inert absorbent. Cover spill with sodium bicarbonate or soda ash and mix. Clean-up personnel require protective clothing and respiratory protection from vapors and mists. Neutralized waste may be containerized and disposed in a RCRA approved waste disposal facility. Flush area of spill with dilute soda ash solution and discard to sewer.

Reportable Quantity (RQ)(CWA/CERCLA) : 1000 lbs.

Ensure compliance with local, state and federal regulations.

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 2 Other: Water reactive

Effective Date: 10-21-86 Supersedes 08-27-85

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This Addendum Must Not Be

Detached from the MSDS

Identifies SARA 313 substance(s)

Any copying or redistribution of the MSDS

must include a copy of this addendum

(Chem.Key: SUF93)

## Addendum to Material Safety Data Sheet

### REGULATORY STATUS

#### Hazard Categories for SARA

##### Section 311/312 Reporting

Acute Chronic Fire Pressure Reactive

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X X X X X

Product or Components  
of Product:

SULFURIC ACID 93% (7664-93-9)

| SARA EHS Sect. 302<br>RQ (lbs.) | SARA Section 313 Chemicals<br>Name List | CERCLA Sec.103<br>RQ (lbs.) | RCRA<br>Sec. 261.33 |
|---------------------------------|-----------------------------------------|-----------------------------|---------------------|
| 1000                            | Yes                                     | 1000                        | No                  |

SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.  
SARA Section 302 EHS TPQ: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (\*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS.  
SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.  
CERCLA Sec. 103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802); Listed at 40 CFR 302.4  
RCRA: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33

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| 1,000                           | No                                      |                             |                     |

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