
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sulfuric Acid (1%)
Catalog Number: BS97
Product Use: For laboratory use only

Manufacturer's Name: Dalynn Biologicals Inc.
Supplier's Name: Dalynn Biologicals Inc.
Address: 3253 – 34 Avenue NE
Calgary, AB, Canada
T1Y 6X2

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Fax: (403) 250-9010
Chemical Emergency: 1-613-996-6666
Phone Number Only

2. HAZARD IDENTIFICATION**Emergency Overview****GHS Classification**

Corrosive to metals (Category 1)
Skin corrosion (Category 1B)
Serious eye damage (Category 1)

GHS Label Elements, Including Precautionary Statements

Pictogram



Signal word Danger

Hazard statement(s)

H290 Maybe corrosive to metals
H303 Maybe harmful if swallowed.
H313 May be harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary statement(s)

P233 Keep container tightly closed
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves & clothing/ eye protection/ face protection.
P310 Immediately call a poison center or doctor.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

3. COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Sulfuric acid	1	7664-93-9	231-639-5	016-020-00-8
Water	99	7732-18-5	231-791-2	-

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move affected individual out of affected area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing. Wash affected area with soap and plenty of water. If feeling unwell, consult a physician.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. If feeling unwell, consult a physician.

If swallowed

Do not induce vomiting. Rinse mouth with water if patient is conscious. If conscious, give a glass of water to dilute stomach contents. If feeling unwell, consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Low flammability as the main component is water.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: carbon dioxide, carbon monoxide, sulfur oxides

Explosion data – sensitivity to mechanical impact

Not sensitive to mechanical impact

Explosion data – sensitivity to static discharge

Not sensitive to static discharge

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Wearing appropriate safety gear including chemical resistant gloves and dust mask or respirator. Soak up with paper towel and place in sealed container and hold for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use in area with adequate ventilation.

Conditions for safe storage

Store tightly sealed at room temperature.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Sulfuric acid	7664-93-9	TWA	0.2 mg/m ³	Canada. British Columbia OEL
		TWAEV	0.2 mg/m ³	Canada. Ontario OELs
		STEV	3 mg/m ³	Canada. Ontario OELs
		STEL	3 mg/m ³	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		TWA	1 mg/m ³	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		TWA	1 mg/m ³	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1
		STEL	3 mg/m ³	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1
		TWA	0.2 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)

Personal protective equipment

Respiratory protection

Use in area with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type ABEK (EN14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands after use.

Eye protection

Face shield and/or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin and body protection

Wear appropriate clothing such as a lab coat that covers as much of the body as possible.

Complete suit can also be worn if desired.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Liquid

Color Clear

Safety data

pH 1.0 to 2.0 at 20°C (68°F)

Melting point/
freezing point 0°C (32°F)

Boiling point 100°C (212°F)

Flash point No data available

Ignition temperature No data available

Auto ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Vapor pressure No data available

Density No data available

Water solubility Soluble

Partition coefficient/
n-octanol/water No data available

Relative vapor density No data available

Odour No data available

Odour threshold No data available

Evaporation rate No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Chemical stability

Stable if stored as recommended.

Materials to avoid

Bases, halides, organic materials, carbides, fulminates, nitrates, picrates, cyanides, chlorates, alkali halides, zinc salts, permanganates, hydrogen peroxide, azides, perchlorates, nitromethane, phosphorous. Reacts violently with: cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, powdered metals

Hazardous decomposition products

Other decomposition products – No data available

Hazardous decomposition products formed under fire conditions – carbon dioxide, carbon monoxide, sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

No data available

Inhalation LC50

No data available

Other information on acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity – single exposure (GHS)

No data available

Specific target organ toxicity – repeated exposure (GHS)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation Maybe harmful if inhaled. Material is destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin May cause irritation or burns depending on duration.

Eyes Causes irritation or burns on contact.

Ingestion Maybe harmful if swallowed. This product contains 99% water therefore no serious side effects are expected unless ingested in large quantities.

Signs and Symptoms of Exposure

No major effects are expected as this product contains 99% water. If symptoms do arise, symptoms may include burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

Additional information

RTECS: WS5600000

12. ECOLOGICAL INFORMATION**Toxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN Number: 2796 Class: 8 Packing Group: II

Proper Shipping Name: Sulfuric acid solution

Reportable Quantity (RQ): 2000 lbs

Marine Pollutant: No

Poison Inhalation Hazard: No

IMDG

UN Number: 2796 Class: 8 Packing Group: II EMS-No: F-A, S-B

Proper Shipping Name: Sulfuric acid solution

Marine Pollutant: No

IATA

UN Number: 2796 Class: 8 Packing Group: II

Proper Shipping Name: Sulfuric acid solution

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by them.

16. OTHER INFORMATION

Further information

Copyright 2018 Dalynn Biologicals Inc. The above information is believed to be correct but does not purport to be all inclusive and shall be only used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dalynn Biologicals Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.
