

Safety Data Sheet

Acid Rain, Simulated

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Acid Rain, Simulated
Recommended Use: Science education applications
Synonyms: Sulfuric Acid, 0.002M
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.
No known OSHA hazards.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	99.99
Sulfuric Acid, Concentrated 18M	7664-93-9	0.01

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Storage: Keep container tightly closed in a cool, well-ventilated place.
Storage Code: Green - general chemical storage

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Section 8

Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sulfuric Acid, Concentrated 18M	0.2 mg/m ³ TWA (thoracic fraction)	N/A	1 mg/m ³ TWA	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

No information available

Section 9

Physical Data

Formula: See Section 3

Molecular Weight: N/A

Appearance: Colorless Liquid

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: 100 C

Flash Point: No data available

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): 1

Vapor Density (Air=1): N/A

Specific Gravity: 1

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: 10

Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity:

Not generally reactive under normal conditions.

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Water-reactive materials

Hazardous Polymerization:

Will not occur

Section 11

Toxicity Data

Routes of Entry	N/A
Symptoms (Acute):	N/A
Delayed Effects:	No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		

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Sulfuric Acid, Concentrated 18M

7664-93-9

Oral LD50 Rat
2140 mg/kg

INHALATION
LC50 Mouse 320
MG/M3
INHALATION
LC50 Rat 510
MG/M3
INHALATION
LC50 GUINEA PIG
18 MG/M3

Carcinogenicity:

Chemical Name

Sulfuric Acid, Concentrated 18M

CAS Number

7664-93-9

IARC

Not listed

NTP

Not listed

OSHA

Listed

Chronic Effects:

Mutagenicity:

No evidence of a mutagenic effect.

Teratogenicity:

No evidence of a teratogenic effect (birth defect).

Sensitization:

No evidence of a sensitization effect.

Reproductive:

No evidence of negative reproductive effects.

Target Organ Effects:

Acute:

See Section 2

Chronic:

Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview:

This material is not expected to be harmful to the ecology.

Mobility:

No data

Persistence:

Biodegradation, adsorption to sediment, and bioconcentration to aquatic organisms should not be significant.

Bioaccumulation:

No data

Degradability:

No data

Other Adverse Effects:

No data

Chemical Name

Water

Sulfuric Acid, Concentrated 18M

CAS Number

7732-18-5

7664-93-9

Eco Toxicity

No data available

96 HR LC50 BRACHYDANIO RERIO > 500 MG/L [STATIC]

24 HR EC50 DAPHNIA MAGNA 29 MG/L

Section 13

Disposal Information

Disposal Methods:

Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s):

Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

Not regulated for transport by DOT

Air - IATA Proper Shipping Name:

Not regulated for air transport by IATA.

Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

Chemical Name

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CAS Number

7664-93-9

§ 313 Name

No

§ 304 RQ

No

CERCLA RQ

No

§ 302 TPQ

No

CAA 112(2) TQ

No

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 09-11-2014

Safety Data Sheet

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health