

Safety Data Sheet

Acetic Acid, Glacial, 17.4M

Section 1

Product Description

Product Name: Acetic Acid, Glacial, 17.4M
Recommended Use: Science education applications
Synonyms: Ethanoic Acid
Supplier: C2A Sales & Supplies (Barbados) Ltd.
#3 Canewood Road, Jackson, St. Michael, Barbados BB11005
1-246-426-1256

Section 2

Hazard Identification

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



DANGER

Flammable liquid and vapor. Causes severe skin burns and eye damage. Harmful to aquatic life.

GHS Classification:

Skin Corrosion/Irritation Category 1A, Flammable Liquid Category 3, Hazardous to the aquatic environment - Acute Category 3

Section 3

Composition / Information on Ingredients

Chemical Name	CAS #	%
Acetic Acid, Glacial	64-19-7	100

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
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 Vapors may travel back to ignition source. Closed Containers exposed to heat may explode. Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6

Spill or Leak Procedures

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Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including;

the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Ventilate the contaminated area.

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. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7 Handling and Storage

Handling:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Storage:

Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Avoid freezing to prevent bursting of the container. Store above 17 C (62.6 F)

Storage Code:

White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Acetic Acid, Glacial	10 ppm TWA	15 ppm STEL	10 ppm TWA; 25	N/A mg/m3 TWA

Control Parameters

Engineering Measures:

Local exhaust ventilation, process enclosures, or other engineering controls are necessary when handling or using this product to avoid overexposure. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

Respiratory protection will be required when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels.

Respirator Type(s):

NIOSH approved air purifying respirator with acid gas cartridge and dust/mist filter

Eye Protection:

Wear chemical splash goggles when handling this product. Additionally, wear a face shield when the possibility of splashing of liquid exists. 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. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Gloves:

Nitrile - Extra Thick (8 mm)

Section 9 Physical Data

Formula: CH₃COOH

Vapor Pressure: 11.4 mmHg at 20 C

Molecular Weight: 60.05

Evaporation Rate (BuAc=1): 0.97 (butyl acetate = 1)

Appearance: Colorless Liquid

Vapor Density (Air=1): 2.1 (air = 1)

Odor: Strong Vinegar

Specific Gravity: 0.7834 at 18 C

Odor Threshold: No data available

Solubility in Water: Soluble

pH: No data available

Log Pow (calculated): -0.31

Melting Point: 17 C

Autoignition Temperature: 463 C

Boiling Point: 118 C

Decomposition Temperature: No data available

Flash Point: 39 C

Viscosity: 1.056 mPa-s @ 25 C

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Section 10

Reactivity Data

Reactivity:	Mildly reactive - See below
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Freezing,
Incompatible Materials:	Acetic anhydride, Acetaldehydes, Caustics (bases), Oxidizing materials, Halogens, Carbonates
Hazardous Decomposition Products:	Carbon dioxide, Carbon monoxide
Hazardous Polymerization:	May trigger violent polymerization in other materials. See chemical incompatibilities.

Section 11

Toxicity Data

Routes of Entry	Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):	Impaired Kidney Function, Respiratory Irritation, Lachrymation

Delayed Effects:	Impaired Kidney Function Dental Erosion Respiratory Irritation Lachrymation Dermatitis
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Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Acetic Acid, Glacial	64-19-7	Not determined	Not determined	INHALATION LC50 Mouse 5620 ppm INHALATION LC50 MAMMAL 11.4 GM/M3

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Acetic Acid	64-19-7	Not listed	Not listed	Not 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:	No information available
Chronic:	Teeth

Section 12

Ecological Data

Overview:	Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility:	This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence:	Biodegradation
Bioaccumulation:	Bioconcentration is not expected to occur.
Degradability:	Biodegrades quickly.
Other Adverse Effects:	No data

Chemical Name	CAS Number	Eco Toxicity
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Section 13**Disposal Information**

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Safety Data Sheet**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):

If discarded, this product is considered a RCRA corrosive waste, D002.

Section 14**Transport Information****Ground - DOT Proper Shipping Name:**

UN2789

Acetic Acid, Glacial

Class 8 (Class 3)

P.G. II

Air - IATA Proper Shipping Name:

UN2789

Acetic Acid, Glacial

Class 8 (Class 3)

P.G. II

Section 15**Regulatory Information****TSCA Status:**

All components in this product are on the TSCA Inventory.

Chemical Name**CAS
Number****§ 313 Name****§ 304 RQ****CERCLA RQ****§ 302 TPQ****CAA 112(2)
TQ**

Acetic Acid, Glacial

64-19-7

No

5000 lb
RQ5000 lb final
RQ; 2270 kg
final RQ

No

No

California Prop 65:

No California Proposition 65 ingredients

Section 16**Additional
Information****Revised: 08/21/2018****Replaces: 06/15/2018****Printed: 08-24-2018**

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