

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Acetic Acid Solution
CAS number	See section 3
Synonyms	No information available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory Chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1
Specific target organ toxicity (single exposure) Category 3
Target Organs - Respiratory system.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Causes severe skin burns and eye damage
May cause respiratory irritation

Precautionary statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Use only outdoors or in a well-ventilated area.

Response

Immediately call a POISON CENTER or doctor/physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting,

Storage

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Acetic acid	-	64-19-7	49.6%
Water	-	7732-18-5	50.4%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
If inhaled	If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
If swallowed	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media CO₂, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

5.4 Further information

Flash Point > 60 °C / > 140 °F

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See section 8 for protective equipment. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities

Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

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

Component	Type	Value
Acetic acid	(Vacated) TWA	10 ppm
	(Vacated) TWA	25 mg/m3
	TWA	10 ppm
	TWA	25 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Acetic acid	TWA	10 ppm
	STEL	15 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Acetic acid	IDLH	50 ppm
	TWA	10 ppm
	TWA	25 mg/m3
	STEL	15 ppm
	STEL	37 mg/m3

Biological occupational exposure limits

No additional information.

8.2 Exposure controls

Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

Body Protection

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear, colorless
Odor	No data available
Odor Threshold	No data available
pH	No data available
Melting Point/Range	No data available
Boiling Point/Range	103 °C / 217.4 °F @ 760 mmHg
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	1.058
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	No data available
Molecular Weight	No data available
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic Acid	3310 mg/kg (Rat)	-	> 40 mg/L (Rat) 4 h
Water	-	-	-

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No components are listed as known or suspected carcinogens.

Specific target organ toxicity - single exposure

Respiratory system.

Specific target organ toxicity - repeated exposure

None known

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Contains a substance which is harmful to aquatic organisms.

Acetic acid

Freshwater Fish:

Pimephales promelas: LC50 = 88 mg/L/96h

Lepomis macrochirus: LC50 = 75 mg/L/96h

Microtox:

Photobacterium phosphoreum: EC50 = 8.8 mg/L/15 min

Photobacterium phosphoreum: EC50 = 8.8 mg/L/25 min

Photobacterium phosphoreum: EC50 = 8.8 mg/L/5 min

Water Flea:

EC50 = 95 mg/L/24h

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

Acetic acid Log Pow: -0.2.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number

UN2790

Proper Shipping name ACETIC ACID SOLUTION
Hazard Class 8
Packaging Group II

IMDG

UN Number UN2790
Proper Shipping name ACETIC ACID SOLUTION
Hazard Class 8
Packaging Group II

IATA

UN Number UN2790
Proper Shipping name ACETIC ACID SOLUTION
Hazard Class 8
Packaging Group II

SECTION 15: Regulatory information

US federal regulations

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

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetic Acid: 5,000 lb HS RQ.

SARA 304 Emergency release notification

Not applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not applicable.

SARA 311/312 Hazardous

See section 2 for more information.

SARA 313 (TRI reporting)

Not applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not applicable.

Safe Drinking Water Act
Acetic Acid: 5,000,000 HS RQ.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Acetic Acid: Listed.

US state regulations

US. Massachusetts RTK - Substance List
Acetic Acid: Listed.

US. New Jersey Worker and Community Right-to-Know Act
Acetic Acid: Listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Acetic Acid: Listed.

California Proposition 65
Not listed.

SECTION 16: Other information

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SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.