SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Acetic Acid 6.0 Molar Solution
CAS number	64-19-7
Synonyms	N/A

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

Identified uses	Laboratory chemicals.

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 1C
Serious Eye Damage/Eye Irritation	Category 1
Acute Aquatic Hazard	Category 3

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Causes severe skin burns and eye damage. Harmful to aquatic life.
Precautionary statements	Prevention: Do not breathe mist, vapors, spray. Wash exposed skin thoroughly after handling. Avoid release to the environment. Wear protective gloves, eye protection. Response: Immediately call a poison center or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Storage: Store locked up. Disposal: Dispose of contents/container to comply with local, state, and federal regulations.

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
Water	Aqua; H2O	7732-18-5	64-67%
Acetic acid	Ethanoic acid; Methanecarboxylic acid	64-19-7	33-36%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Allow victim to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
In case of skin contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
If swallowed	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed
Causes severe skin burns and serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed
Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2 Specific hazards arising from the substance or mixture
Thermal decomposition generates corrosive vapors.

5.3 Special protective equipment and precautions for firefighters
Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

5.4 Further information

Flash Point	No information available.

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

Safety glasses. Gloves. Protective clothing. Evacuate unnecessary personnel. Equip cleanup crew with proper protection. Ventilate area.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4 Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray.

Hygiene measures

Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Comply with applicable regulations. Keep container closed when not in use.

Incompatibilities
Strong oxidizers. Metals. Strong bases. Sources of ignition. Direct sunlight.

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	25 mg/m3
	TWA	10 ppm	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	25 mg/m3
	STEL	15 ppm	37 mg/m3

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment

Eye/face protection
Chemical goggles or face shield.

Skin protection
Wear protective gloves.

Body Protection
Wear suitable protective clothing.

Respiratory protection
Wear appropriate mask.
High gas/vapor concentration: gas mask with filter type E.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Vinegar odor
Odor Threshold	No data available
pH	No data available
Melting Point/Range	No data available
Boiling Point/Range	No data available
Evaporation Rate	No data available
Flammability (solid)	Not applicable
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No data available
Vapor Density	No data available
Density	1.04 g/mL
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	1.7 mm^2/s, kinematic
Molecular Formula	C2 H4 O2
Molecular Weight	60.05 g/mol
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
Thermal decomposition generates corrosive vapors.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Reacts violently with (some) bases: release of heat.

10.4 Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials
Strong oxidizers. Metals. Strong bases.

10.6 Hazardous decomposition products
Carbon monoxide. Carbon dioxide. Corrosive vapors.

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)	1,112 mg/kg (Rabbit)	> 40 mg/L (Rat) 4 h

Skin corrosion/irritation
Causes severe skin burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
Not classified.

Germ cell mutagenicity
Not classified.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Acetic acid	64-19-7	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Reproductive toxicity
Not classified.

Chronic effects

Not classified.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Avoid release to the environment.

Product		Species	Test Results
Acetic acid	LC50	Pimephales promelas	88 mg/L/96h
	LC50	Lepomis macrochirus	75 mg/L/96h
	EC50	Photobacterium phosphoreum	8.8 mg/L/5 min
	EC50	Water Flea	95 mg/L/24h

12.2 Persistence and degradability

Readily biodegradable in water. Biodegradable in the soil.

12.3 Bio accumulative potential

Low potential for bioaccumulation.

12.4 Mobility in soil

Highly mobile in soil.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

May be harmful to plant growth, blooming, and fruit formation.

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-no	UN2790
Proper Shipping Name	Acetic acid solution

Hazard Class	8
Packing Group	III

IMDG

UN-no	UN2790
Proper Shipping Name	Acetic acid solution
Hazard Class	8
Packing Group	III

IATA

UN-no	UN2790
Proper Shipping Name	Acetic acid solution
Hazard Class	8
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Acetic acid (CAS #64-19-7), RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) - Hazardous Substances

Listed, Acetic acid (CAS #64-19-7), RQ: 5000 lb.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Listed, Acetic acid (CAS #64-19-7).

US state regulations

US. Massachusetts RTK - Substance List

Listed, Acetic acid (CAS #64-19-7).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Acetic acid (CAS #64-19-7).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Acetic acid (CAS #64-19-7).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 10/13/2020
Revision 1: 02/07/2025

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.