

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Formic Acid 2% Solution
CAS number 64-18-6
Synonyms N/A

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

Identified uses General Laboratory Reagent.

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
Eye Damage / Irritation Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Causes severe skin burns and eye damage.
Causes serious eye irritation.

Precautionary statements

Prevention: Do not breathe fumes, mist, vapors, or spray. Wash arms, hands, and face thoroughly after handling. Wear protective gloves and eye protection.

Response: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water).

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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 eye irritation persists, get medical attention.

Storage: Store locked up.

Disposal: Dispose of contents in accordance with local, state, federal, and international regulations.

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

Data not available.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua; H ₂ O	7732-18-5	98%
Formic acid	Methanoic acid; Formylic acid	64-18-6	2%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

Remove person to fresh air and keep comfortable for breathing.

In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness, and pain.

In case of eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

If swallowed Rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. Causes serious eye irritation. May cause irritation to areas of contact. Wash areas of contact with water. For eyes, get medical attention. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Call a physician immediately. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

5.3 Special protective equipment and precautions for firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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
1	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective gloves and eye protection.

6.2 Environmental precautions

No information available.

6.3 Methods and materials for containment and cleaning up

Cover with Soda Ash or Sodium Bicarbonate. Mix and add water if necessary. Scoop up slurry and neutralize with dilute Sodium Hydroxide. Wash neutral solution down the drain with excess water.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store locked up. Protect from freezing and physical damage.

Incompatibilities

Sulfuric acid, strong caustics, furfuryl alcohol, hydrogen peroxide, strong oxidizers, and bases.

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	
Formic acid	(Vacated) TWA	5 ppm	9 mg/m ³
	TWA	5 ppm	9 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value
Formic acid	TWA	5 ppm
	STEL	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Formic acid	IDLH	30 ppm	
	TWA	5 ppm	9 mg/m ³

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection

Wear eye protection. Safety glasses or goggles.

Skin protection

Wear chemical resistant gloves.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Normal room ventilation is adequate.

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	Data not available
Odor Threshold	Data not available
pH	2
Melting Point/Range	0.0°C
Boiling Point/Range	100°C
Evaporation Rate	Data not available
Flammability (solid)	Data not available
Flammability or explosive limit	Data not available
Upper	
Lower	
Vapor Pressure	Data not available
Vapor Density	Data not available
Density	1
Solubility	Miscible
Partition coefficient; n-octanol/water	Data not available
Autoignition Temp	Data not available
Decomposition Temp	Data not available
Viscosity	Data not available
Molecular Formula	C H2 O2
Molecular Weight	46.02 g/mol
VOC Content(%)	Data not available
Oxidizing properties	Data not available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Incompatible materials.

10.5 Incompatible materials

Sulfuric acid, strong caustics, furfuryl alcohol, hydrogen peroxide, strong oxidizers, and bases.

10.6 Hazardous decomposition products

Will not occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Formic acid	730 mg/kg (Rat)	-	15 g/m3 (Rat) 15 min

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Not applicable.

Germ cell mutagenicity

Not applicable.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Formic acid	64-18-6	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Not applicable.

Specific target organ toxicity - repeated exposure

Not applicable.

Reproductive toxicity

Not applicable.

Chronic effects

Not applicable.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Not applicable.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

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) Not regulated.

IMDG Not regulated.

IATA Not regulated.

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, Formic acid (CAS #64-18-6), 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)

Listed, Formic acid (CAS #64-18-6).

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, Formic acid (CAS #64-18-6), RQ: 5000 lb.

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

Listed, Formic acid (CAS #64-18-6).

US state regulations

US. Massachusetts RTK - Substance List

Listed, Formic acid (CAS #64-18-6).

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

Listed, Formic acid (CAS #64-18-6).

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

Listed, Formic acid (CAS #64-18-6).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 02/13/2025

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.