

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: **Formic Acid 96%, ACS**
Part Number: 10943
CAS-No.: Not applicable
SDS Number: 2960

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: Newcomer Supply
 2505 Parview Road
 Middleton, WI 53562 USA

Telephone: 1-800-383-7799

Fax: 1-608-831-0866

Website: www.newcomersupply.com

Email: newly@newcomersupply.com

24 HOUR EMERGENCY CONTACT
 CALL CHEMTREC: 1-800-424-9300
 Contact CHEMTREC only in the event of
 an emergency involving a chemical spill,
 leak, fire, exposure or other accident.

2. HAZARD(S) IDENTIFICATION
2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200)

Flammable liquid, Category 4

Skin corrosion, Category 1A

Serious eye damage, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Combustible liquid
- Causes severe skin burns and eye damage
- Causes skin irritation

Precautionary Statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces – No smoking
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapours/spray
- Wash skin thoroughly after handling

Response:

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

· In case of fire use carbon dioxide, dry chemical or alcohol-resistant foam.

· IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

· Wash contaminated clothing before reuse

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

· Specific treatment: see first aid measures in section 4

IF IN EYES: 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

Storage:

- Store in a well ventilated place. Keep cool
- Store locked up

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Disposal:

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

2.3 Description of any hazards not otherwise classified None

2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.2 Mixture
Hazardous Components

Component		Concentration
Name	Formic Acid	
CAS-No.	64-18-5	96%

4. FIRST-AID MEASURES
4.1 Description of necessary measures
Inhalation (breathing)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: 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.

Ingestion (swallowed)

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES
5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

Health	Fire	Reactivity
hazard: 3	hazard: 2	hazard: 0

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

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Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area. Keep product away from heat, flame, ignition sources, and reactive materials. Avoid accumulation of vapor to form explosive concentration. Pay particular attention to low areas where vapor accumulates more easily.

6.2 Methods and material for containment and cleaning up

Apply personal protective equipment (see Section 8). Contain spill. Prevent further leakage if possible and safe to do so. Ensure proper ventilation. For small amounts, wipe or absorb spill using inert material and dispose of according to local regulations. For large amounts, evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Dispose of any contaminated materials according to local regulations. Eliminate sources of ignition.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities

Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Components with limit values that require monitoring at the workplace

Component	CAS-No.	Regulatory	Value	Parameters
Formic Acid	64-18-5	OSHA PEL	TWA	5 ppm (9 mg/m ³)
		ACGIH TLV	TWA	5 ppm (9.4 mg/m ³)
		ACGIH TLV	STEL	10 ppm (19 mg/m ³)
		NIOSH REL	TWA	5 ppm (9 mg/m ³)

8.2 Exposure Controls

Appropriate engineering controls

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises. Use product in an appropriately designated fume hood. Take measures to keep concentrations below acceptable limits.

8.3 Personal Protective Equipment

Eye/Face protection

Wear chemical safety goggles and/or a full face shield if splashing is possible. Keep eye wash fountain nearby.

Skin Protection

Wear chemical-resistant gloves. Gloves should be resistant to components of product. Refer to glove manufacturer for appropriate type and glove thickness.

Body Protection

No data available

Respiratory Protection

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Respirators should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Where the potential exists for exposure over 5 ppm: use a NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus or an emergency escape air cylinder.

Exposure to 30 ppm is immediately dangerous to life and health. If the possibility of exposure above 30 ppm exists, use a NIOSH approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive-pressure mode equipped with an emergency escape air cylinder. In case of emergency, entry into or escape from unknown concentrations, select the highest level approved respiratory protection available.

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Physical state	Translucent, colorless liquid
Odor	Pungent odor
Odor threshold	No data available
pH	No data available
Melting point/freezing point	8.3°C (46.9°F)
Initial boiling point and boiling range	101°C (213.8 °F)
Flash point	69°C (156°F) (Closed cup)
Evaporation rate	No data available
Flammability (solid, gas)	Flammable liquid
Upper flammability or explosive limits	18%
Lower flammability or explosive limits	57%
Vapor pressure	No data available
Vapor density	1.21
Relative density	No data available
Solubility(ies)	Water miscible
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY
10.1 Reactivity

No data available

10.2 Chemical stability

Stable in a closed container within label-specified storage temperature and expiration date.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, sparks, open flame, and ignition sources.

10.5 Incompatible materials

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Formic acid reacts violently with oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); strong inorganic bases (such as sodium hydroxide and potassium hydroxide); and strong organic bases (such as amines) causing a fire and explosion hazard. Formic acid reacts with chemically active metals (such as potassium, sodium, magnesium and zinc) to form flammable and explosive hydrogen gas and metal salts. Formic acid is decomposed by strong acids (such as hydrochloric, sulfuric and nitric) for form poisonous carbon monoxide gas and reacts with cyanide salts to form toxic hydrogen cyanide gas. Formic acid attacks many plastics and metals.

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Inhalation exposure**

Inhaling formic acid can irritate the lungs causing coughing and/or shortness of breath. Higher exposures may cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.

Oral exposure

No data available

Dermal exposure

No data available

Skin corrosion/irritation

Contact can severely irritate and burn the skin.

Serious eye damage/irritation

Contact can severely irritate and burn the eyes with possible eye damage.

Respiratory or skin sensitization

No data available

Germ Cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Acute toxicity

Formic Acid:

LD50 rat oral 1100 mg/kg

LD50 mouse oral 700 mg/kg

LC50 dog oral 4000 mg/kg

IDLH 30 ppm

Carcinogenicity

IARC: None of the components are listed

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NTP: None of the components are listed
OSHA: None of the components are listed

Additional information

RTECS: No data available

12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**13.1 Waste disposal methods****Contents**

Dispose of contents in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION**14.1 DOT (US)**

UN-Number	1779
Proper shipping name	Formic Acid
Hazard class	8
Packing group	II
Environmental hazards	No data available

15. REGULATORY INFORMATION**15.1** No data available**16. OTHER INFORMATION**

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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