

Part Number: 10943

**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](http://www.newcomersupply.com)
**Email:** [newly@newcomersupply.com](mailto: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

**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:**

- In case of fire use carbon dioxide, dry chemical or alcohol-resistant foam.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- 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 SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

**Storage:**

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

**Disposal:**

Part Number: 10943

· 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**

Part Number: 10943

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 <sup>3</sup> )
		ACGIH TLV	TWA	5 ppm (9.4 mg/m <sup>3</sup> )
		ACGIH TLV	STEL	10 ppm (19 mg/m <sup>3</sup> )
		NIOSH REL	TWA	5 ppm (9 mg/m <sup>3</sup> )

**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**

Part Number: 10943

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**

Part Number: 10943

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

Part Number: 10943

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)**

<b>UN-Number</b>	1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard class</b>	8
<b>Packing group</b>	II
<b>Environmental hazards</b>	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](http://www.newcomersupply.com)

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