

Material Safety Data Sheet

Provided by:

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name FORMIC ACID 95%

Synonyms

Chemical Name FORMIC ACID

Emergency phone: 281-457-4888

Chemtrec: 800-424-9300

Date of Issue: 10/1/00

Revised Date: N/A

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	PERCENT	CAS NO.
WATER	REMAINDER	7732-18-5
FORMIC ACID	94% - 97%	64-18-6

SECTION 3 - HAZARDS IDENTIFICATION

Potential Health Effects

ACGIH - TLV: 5 PPM

Eye Contact CONTACT MAY CAUSE EYE IRRITATION AND BURNS.

Skin Contact PROLONGED OR REPEATED CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS (RASH).

Ingestion CORROSIVE AND MAY CAUSE SEVERE AND PERMANENT DAMAGE TO MOUTH, THROAT AND STOMACH.

Inhalation MAY CAUSE RESPIRATORY TRACT IRRITATION AND PULMONARY EDEMA.

Carcinogenicity: *NTP* NO *IARC* NO *OSHA* NO

SECTION 4 - FIRST AID PROCEDURES

Eye Contact: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

Skin Contact: IMMEDIATELY REMOVE CONTAMINATED CLOTHING OR SHOES, WIPE EXCESS FROM SKIN AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. USE SOAP IF AVAILABLE OR FOLLOW BY WASHING WITH SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. GET MEDICAL ATTENTION.

Inhalation: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

Ingestion: DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER OR MILK AND GET IMMEDIATE MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON!

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point	122 - 130
Extinguishing Media	DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY, FOG OR STANDARD FOAM.
Special Firefighting Procedures/Precuations	WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. STAY UPWIND AND KEEP OUT OF LOW AREAS.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

For Spill:	SPILLS SHOULD BE CONTAINED, SOLIDIFIED AND PLACED IN CONTAINERS FOR DISPOSAL.
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SECTION 7 - HANDLING AND STORAGE

Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated area, away from heat and incompatible materials. Protect containers from physical damage.

AVOID SOURCES OF IGNITION AND EXCESSIVE HEAT.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection	USE A NIOSH/MSHA APPROVED RESPIRATOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS.
Ventilation	LOCAL AND MECHANICAL RECOMMENDED.
Protective Gloves	CHEMICAL IMPERVIOUS GLOVES.
Eye/Face Protection	CHEMICAL SAFETY GOGGLES AND/OR FULL-FACE SHIELD.
Other Protection	CHEMICAL RESISTANT CLOTHING SUCH AS COVERALLS/APRON, BOOTS, ETC.
Work Practices	USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F): 217	Vapor Pressure (mmHg): 40 (@20 C)
Freezing Point (°F): 33	Vapor Density (Air=1): 1.6
Solubility (H₂O): INFINITE	Specific Gravity (H₂O=1): 1.1 - 1.3
pH 3.7	Evaporation Rate: 2.1
Appearance/Odor:	COLORLESS TO YELLOW LIQUID WITH A PUNGENT, PENETRATING ODOR.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	YES
Incompatible Materials	OXIDIZERS AND BASES.
Decomposition Products	CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN.
Hazardous Polymerization:	WILL NOT OCCUR.

SECTION 11 - TOXICITY INFORMATION

LD50 ORAL (rat) = 1100 mg/kg LC50 INHL (rat) = 15 g/cu m LD50 ORAL (mouse) = 700 mg/kg LC50 INHL (mouse) = 6200 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

LC50/96HR/GOLDEN ORFE = 46 - 100 MG/L EC50/48HR/DAPHNIA MAGNA = 34 MG/L LC50/72HR/ALGAE = 27 MG/L

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSE OF WASTE MATERIALS ACCORDING TO ALL FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION 14 - TRANSPORT INFORMATION

USA DOT Shipping Name: FORMIC ACID SOLUTION

Hazard Class: 8

UN/NA Number: UN1779

Packing Group: II

Subsidiary Hazard

Marine Pollutant: NO

SECTION 15 - REGULATORY INFORMATION

CERCLA RQ (lbs): 5000

SARA Title III Section 312:

Acute **Chronic** **Flammable** **Sudden Release of Pressure** **Reactive**

SARA Title III Section 313: No

SARA Extremely Hazardous Substance: No

HMIS HAZARD RATING

Health: 3 **Fire:** 2 **Reactivity:** 0

0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

SECTION 16 - OTHER INFORMATION

EPA Pesticide Registration Number: NOT APPLICABLE

NSF Maximum Use Level for Potable Water (Standard 60): NOT APPLICABLE

TSCA (Toxic Substance Control Act), 40 CFR 710:

Sources of the raw materials used in this mixture assure that all chemical ingredients present are in compliance with Section 8(b) Chemical Substance Inventory, or are otherwise in compliance with TSCA.

DISCLAIMER

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