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MSDS

Material Safety Data Sheet



1403 Herkimer Street Joliet, IL 60432-1059 (877) EKI-CHEM (815) 723-4000 www.eki-chem.com

24 HOUR EMERGENCY TELEPHONE NUMBER CALL CHEMTREC 1-800-424-9300

Formic Acid, 96%

SECTION 1 PRODUCT IDENTIFICATION

NAME: Formic Acid, 96% EKI ORDER NUMBER: 4464

SYNONYMS: N/I CAS NO: 64-18-6 FORMULA: HCOOH

REVISION DATE: 19 April 2004

****LABEL HAZARD STATEMENT AND PRECAUTIONS****

DANGER! FLAMMABLE LIQUID AND VAPOR. CAUSES SEVERE BURNS. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. VAPOR CAUSES IRRITATION. Keep away from heat, sparks and flame. Do not get on skin, in eyes, on clothing. Keep container tightly closed. Avoid breathing vapors. Use only with adequate ventilation. Wash thoroughly after handling.

SECTION 2 HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

Formic Acid is subject to the reporting requirements of SARA 313 and 40CFR372.

SECTION 3 PHYSICAL / CHEMICAL CHARACTERISTICS

SOLUBILITY IN WATER: Miscible BOILING POINT (C): ~101 VAPOR PRESSURE (mm Hg): ~40 VAPOR DENSITY: 1.6 SPECIFIC GRAVITY: ~1.2 MELTING POINT (C): ~8

EVAPORATION RATE: 2.1

APPEARANCE AND ODOR: Clear, colorless liquid. Characteristic odor.

SECTION 4 FIRE / EXPLOSION HAZARD DATA

FLASH POINT (C): 50

AUTOIGNITION TEMPERATURE (C): 601

FLAMMABLE LIMITS (%): UEL: 57 LEL: 18

EXTINGUISHING MEDIA: Dry chemical, CO_2 , water spray, "alcohol foam".

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive-pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Explosive above flash point within flammable limits shown above.

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SECTION 5 REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat, sources of ignition. MATERIALS TO AVOID: Strong acids and bases, oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂. HAZARDOUS POLYMERIZATION: Does not occur.

SECTION 6 HEALTH HAZARD DATA

ROUTES OF ENTRY AND EFFECTS OF OVEREXPOSURE:

INHALATION: Severe irritation of nose, throat and upper respiratory tract. High concentrations may cause lung damage.

SKIN CONTACT: Causes burns.

EYE CONTACT: May cause severe burns and eye damage.

SKIN ABSORPTION: N/I

INGESTION: Causes burns to mouth, throat and esophagus. May be fatal.

CHRONIC: Skin irritation, burns, liver and kidney damage. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/I

CARCINOGENICITY: None

****FIRST AID PROCEDURES****

GET IMMEDIATE MEDICAL ATTENTION

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally.

SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes while removing contaminated garments.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: Do NOT induce vomiting. If conscious, give several glasses of water to drink.

SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: Ventilate area. Wear suitable respirator. Absorb with inert material and containerize for disposal.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state, and local environmental regulations.

STORAGE: Store tightly closed at 15-30 C.

SECTION 8 CONTROL MEASURES

VENTILATION: Local preferred.

RESPIRATORY PROTECTION: If required, full face positive pressure acid gas

respirator.

EYE PROTECTION: Chemical splash safety goggles and/or full face shield.

SKIN PROTECTION: Gloves, lab coat and impervious apron.

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