

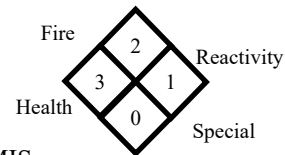
SAFETY DATA SHEET

1 PRODUCT IDENTIFICATION

THE BUTLER CORPORATION
251 MOODY STREET
LUDLOW, MASSACHUSETTS 01056
INTERNET: www.butlersystem.com, email: info@butlersystem.com
TELEPHONE 1-800-535-5025
Chemtrec: 800-424-9300, 703-527-3887

HAZARD RATING

4=EXTREME
3=HIGH
2=MODERATE
1=SLIGHT
0=INSIGNIFICANT



CHEMICAL NAME SYNONYM

MIXTURE

CHEMICAL FAMILY:
CARBOXYLIC ACIDS

TRADE NAME SYNONYM

FORMIC ACID

2 HAZARDS IDENTIFICATION

HEALTH HAZARD DATA: GHS Classification:



Signal word: Warning: Irritant, harmful if swallowed.

ROUTE OF EXPOSURE

INHALATION	YES-CAN IRRITATE EYES, NOSE AND THROAT
SKIN ABSORPTION	YES-CAN CAUSE SEVERE IRRITATION AND BLISTERING
INGESTION	YES-CAN CAUSE DISCOMFORT IF TAKEN INTERNALLY
SKIN CONTACT	YES-PROLONG CONTACT MAY CAUSE IRRITATION
EYE CONTACT	YES-DIRECT CONTACT MAY CAUSE PERMANENT DAMAGE

3 COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL OR COMPONENT	%	CAS NUMBER
FORMIC ACID	90-100	64-18-6

4 FIRST AID MEASURES

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE	UNKNOWN
EFFECTS OF OVEREXPOSURE	UNKNOWN

EMERGENCY FIRST AID PROCEDURES

EYES: FLUSH WITH WATER FOR 15 MINUTES IF IRRITATION PERSISTS SEE A PHYSICIAN	SKIN: WASH WITH WATER THOROUGHLY IF IRRITATION PERSISTS SEE A PHYSICIAN
INHALATION: MOVE TO FRESH AIR IF IRRITATION PERSISTS SEE A PHYSICIAN	INGESTION: DRINK MILK OR WATER AND SEE A PHYSICIAN

NOTES TO PHYSICIAN:

5 FIRE FIGHTING MEASURES

FLASH POINT (TOC)	58°C	AUTOIGNITION TEMPERATURE	
FLAMMABLE LIMITS IN AIR % BY VOL. LOWER	14.3	UPPER	34
EXTINGUISHING MEDIA	FOAM, CO2, DRY CHEMICAL, WATER FOG		
SPECIAL FIRE FIGHTING PROCEDURES	USUAL FIRE FIGHTING PROCEDURES CAN BE USED		
UNUSUAL FIRE AND EXPLOSION HAZARD	NFPA FLAME LIMITS 18%		

6-ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: FLUSH WITH WATER****NEUTRALIZING CHEMICALS****WASTE DISPOSAL METHOD: WASTE MAY BE DISCHARGED INTO SANITARY SEWER AFTER NEUTRALIZING IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS****7 HANDLING & STORAGE****STORE IN A COOL PLACE, AVOID BREATHING VAPOR.****KEEP AWAY FROM EYES AND AVOID PROLONG CONTACT WITH SKIN****8 EXPOSURE CONTROL/PERSONAL PROTECTION****SPECIFIC PERSONAL PROTECTIVE EQUIPMENT
CHEMICAL CARTRIDGE RESPIRATOR****RESPIRATORY (SPECIFY IN DETAIL)
NORMAL ROOM VENTILATION SHOULD BE SUFFICIENT****EYE: SPLASH PROOF, SIDE SHIELD GOGGLES****GLOVES: CONTACT IMPERMEABLE GLOVES SUGGESTED****OTHER CLOTHING AND EQUIPMENT****AVOID BREATHING VAPOR TLV/TWA(ACGIH) 5PPM****9: PHYSICAL DATA**

BOILING POINT:	105°F	MELTING POINT:	-5 °C	pH: 2 IN 10G/1 WATER
SPECIFIC GRAVITY	1.20	VAPOR PRESSURE	32	
VAPOR DENSITY(AIR=1)	ND	SOLUBILITY IN H₂O BY WT.	SOLUBLE	
%VOLATILES BY WT.		EVAPORATION RATE (BUTYL ACETATE=1)	ND	
APPEARANCE AND ODOR	COLORLESS LIQUID, SHARP PUNGENT ODOR			

10: STABILITY & REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY--HIGH TEMPERATURES	YES	INCOMPATIBILITY	ALKALIS, NYLON, OXIDIZING AGENTS,
HAZARDOUS DECOMPOSITION PRODUCTS WHEN EXPOSED TO FIRE CAN PRODUCE-CARBON MONOXIDE	YES	CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION -NONE	CORROSIVE TO CARBON STEEL, COPPER ALLOYS AND LEAD

11: TOXICOLOGICAL INFORMATION**NONE KNOWN****12: ECOLOGICAL INFORMATION****NONE KNOWN****13: DISPOSAL CONSIDERATIONS****IN ACCORDANCE TO APPLICABLE FEDERAL STATE AND LOCAL REGULATIONS****14:TRANSPORT INFORMATION****REFER TO BILL OF LADING OR CONTAINER LABEL****15:REGULATORY INFORMATION****USA (TSCA), CANADA (DSL)****16:OTHER INFORMATION****PRECAUTIONARY STATEMENTS WASH AFTER HANDLING AND KEEP OUT OF REACH OF CHILDREN****DISCLAIMER OF LIABILITY**

One should always use chemicals with an awareness of the potential hazard (known and unknown) of their effect on the human system. We urge users to minimize employee exposure to all chemicals, including this product, and to keep the level of exposure commensurate with good industrial hygiene practices.

The manufacturer and seller warrant that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information. The hazards connected with the use of the material and the results to be obtained from the use thereof.

ND-NOT DETERMINED**NA-NOT APPLICABLE****NE-NOT ESTABLISHED****DATE 06-10-2014 – FORMIC ACID**