



MATERIAL SAFETY DATA SHEET

REVISION DATE: 10/11/2013

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PREPARED BY:

EH&S DEPARTMENT

1. CHEMICAL PRODUCT

PRODUCT NAME: **ML-500, Microbiocide**

PRODUCT CODE: 119146

NFPA/HMIS HAZARD CODES(minimal=0; slight=1; moderate=2; serious=3; severe=4)

Health: 3/3

Fire: 1/1

Reactivity: 0/0

Special/Protective Equipment: CORR/D

NAME OF THE MANUFACTURER: Rochester Midland Corporation
155 Paragon Drive
Rochester, New York 14624
USA

Emergency Phone:
INFOTRAC: 1-800-535-5053
OUTSIDE US: 1-352-323-3500

2. HAZARDS IDENTIFICATION

EFFECTS FROM ACUTE EXPOSURE:

INGESTION: Harmful if swallowed. May be fatal if swallowed. May cause burns to mucous membranes of mouth, throat, and digestive tract. Causes vomiting, nausea, and diarrhea. Headache, dizziness, respiratory irritation, nausea, possible convulsions. May cause confusion, delirium, and coma. Aspiration can be a hazard if this material is swallowed. May cause central nervous system effects.

SKIN CONTACT: Harmful if absorbed through the skin. May cause moderate skin irritation. Prolonged contact causes severe burns which may not be immediately painful or visible. May stain skin. May cause a rash and itching of the skin. Repeated or prolonged contact may cause skin sensitization.

INHALATION: Harmful if inhaled. Inhalation of vapors or mists may cause nose and respiratory irritation, sore throat, and coughing.

EYE CONTACT: Causes severe eye irritation. May Cause Eye Burns. May cause permanent eye damage. May cause blindness. Vapor and/or liquid cause irritation.

CHRONIC EFFECTS: Glutaraldehyde has been toxic to the fetus in lab animals at doses toxic to the mother. This material or its emissions may cause an allergic or sensitization reaction and thereby aggravate systemic disease.

EFFECTS/CARCINOGENICITY: None listed under OSHA, IARC, or NTP.

ROUTES OF ENTRY: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	%	ACGIH TLV	OSHA PELs
Glutaraldehyde (in water solution) 111-30-8	50	Not applicable	Not applicable

4. FIRST AID MEASURES

INGESTION: DO NOT INDUCE VOMITING. Give nothing by mouth. Get immediate medical attention.

SKIN: Remove contaminated clothing and discard. In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

4. FIRST AID MEASURES

INHALATION:	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
EYES:	Rinse immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue rinsing. Obtain immediate medical attention.
NOTES TO PHYSICIAN:	Probable mucosal damage may contraindicate gastric lavage. Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.

5. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	(F): None to boiling (C): None to boiling
METHOD:	PMCC
FLAMMABLE LIMITS IN AIR	
LOWER (%):	No data
UPPER (%):	No data
SENSITIVITY TO MECHANICAL IMPACT(Y/N):	NO
SENSITIVITY TO STATIC DISCHARGE:	Sensitivity to static discharge is not expected.
SUITABLE EXTINGUISHING MEDIA:	Water fog, carbon dioxide, foam, dry chemical.
FIRE FIGHTING PROCEDURES:	Residue can burn after water has evaporated. Contain runoff for proper disposal. Fire-fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires.

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:	
SMALL SPILLS:	Pick up with absorbant material. Flush residue with water.
LARGE SPILLS:	Keep out of drains, sewers, streams, or other bodies of water. Dike to contain. Pick up with absorbant material. Put in suitable container for disposal. Product is toxic to fish in high concentrations.
PERSONAL PRECAUTIONS:	Evacuate personnel to safe areas. Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.
ENVIRONMENTAL PRECAUTIONS:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not let product enter drains.
METHODS FOR CLEANING UP:	Only trained and properly protected personnel must be involved in clean-up operations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:	Danger: Corrosive. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Keep container closed when not in use. Use in a well ventilated area to prevent irritation by vapors. Static ignition hazard can result from handling and use. Keep container closed.
OTHER PRECAUTIONS:	Must not be used in the form of a spray or aerosol. Read and follow label instructions. Keep out of reach of children.
SPECIFIC USE(S):	Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:



EXPOSURE CONTROLS:	Use in a well ventilated area.
RESPIRATORY PROTECTION:	Use approved NIOSH respiratory protection if TLV/PEL exceeded or if over exposure is likely.
PROTECTIVE GLOVES:	Nitrile, neoprene, or other appropriate gloves are recommended to minimize hand skin contact.
EYE PROTECTION:	Goggles and face shield are recommended to minimize eye contact.

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OTHER PERSONAL PROTECTION EQUIPMENT:	Appropriate protective clothing as needed to prevent skin contact. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.
VENTILATION:	General mechanical and/or local exhaust as needed to meet exposure limits if mist in air.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Clear liquid. Fruity odor	
BOILING POINT (F):	212.9°	(C) 100.5°
VAPOR PRESSURE:	0.2 mm Hg @ 20° C	
VAPOR DENSITY (AIR=1):	Not determined	
SOLUBILITY IN WATER:	Not determined	
SPECIFIC GRAVITY:	1.129	
VOC Content (%):	Not determined	
EVAPORATION RATE:	Not determined	
PH:	3.1 - 4.5	

10. STABILITY AND REACTIVITY

STABILITY DATA:	STABLE
POLYMERIZATION:	Will Not Occur.
HAZARDOUS DECOMPOSITION:	Oxides of Carbon.
INCOMPATIBILITY (MATERIALS TO AVOID):	Amines. Ammonia. Strong acids, bases and oxidizing agents. Avoid: Aluminum. Carbon steel Copper. Mild steel.
CONDITIONS/HAZARDS TO AVOID:	Keep away from heat, sparks and flame. Freezing conditions.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Acute oral (LD50): 200 mg/kg Rat Male Acute Dermal (LD50): 1749 mg/kg Rabbit Acute Inhalation (LC50): > 27 ppm, (4 hours) Rat
EFFECTS OF CHRONIC EXPOSURE:	In a NTP chronic 2-year inhalation study on glutaraldehyde, no carcinogenicity was seen in rats or in mice. An increase in large granular lymphocytes in Fisher rats dosed with glutaraldehyde for two years was random or a secondary carcinogenic effect due to a modifying influence on the occurrence of this common neoplasm in this rat strain. Glutaraldehyde has been toxic to the fetus in lab animals at doses toxic to the mother. Did not cause birth defects in laboratory animals. In animal studies, did not interfere with reproduction. In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were predominantly negative.
OTHER TOXIC EFFECTS:	Not established.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:	Daphnia magna LC50 = 0.69 mg/l Fathead minnow LC50 = 10.8 mg/l
CHEMICAL FATE INFORMATION:	No data at this time.
MOBILITY:	Not applicable.
PERSISTENCE/DEGRADABILITY:	Not applicable
BIOACCUMULATIVE POTENTIAL:	Not applicable
OTHER ADVERSE EFFECTS:	Not applicable

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:	Dispose in accordance with Federal, State and Local regulations.
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14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/Receiving documents for up to date shipping information.

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15. REGULATORY INFORMATION

PRODUCT COMPOSITION CAS#	%	TSCA:	EINECS:	Canada DSL:	CA PROP 65:
Glutaraldehyde (in water solution) 111-30-8	50	Listed	Listed	Listed	Not Listed

PRODUCT COMPOSITION CAS#	%	CERCLA:	SARA 302:	SARA 313:
Glutaraldehyde (in water solution) 111-30-8	50	Not Listed	Not Listed	Not Listed

PRODUCT COMPOSITION CAS#	%	Canada WHMIS:
Glutaraldehyde (in water solution) 111-30-8	50	Listed

The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	MARTK:
Glutaraldehyde (in water solution) 111-30-8	50	Listed

The following components of this material are included in the New Jersey Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	NJRTK:
Glutaraldehyde (in water solution) 111-30-8	50	Listed

The following components of this material are included in the Pennsylvania Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	PARTK:
Glutaraldehyde (in water solution) 111-30-8	50	Listed

16. OTHER INFORMATION

This information was compiled from current, reliable sources and is believed to be correct. As data, and/or regulations change, and conditions of use and handling are beyond our control, no warranty, express or implied, is made as to completeness or continuing accuracy of this information.

*** END OF MSDS ***