



SAFETY DATA SHEET

Product: MARC 277 URONIC SALT REMOVER

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 277 URONIC SALT REMOVER

SDS DATE: 12/26/13

SUPPLIER: Mid-American Research Chemical Corp.

ADDRESS: P. O. Box 927 Columbus, NE 68602-0927

PHONE: 402-564-7104 FAX: 402-563-1290

EMERGENCY PHONE: InfoTrac 1-800-535-5053

E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Cleaner. Descaler.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: May cause slight eye and skin irritation. (Irritant)

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: **CAUTION:** KEEP OUT OF REACH OF CHILDREN! Contains a low pH organic salt. May cause mild eye and skin irritation.

EMERGENCY OVERVIEW AND POTENTIAL HAZARDS: This product is a colorless to slight amber liquid with a mild odor. It is irritating to the eyes and a mild skin irritant. If ingested, this product may be harmful.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>
Organic Salt	506-89-8
Inorganic Salts	Proprietary
Fragrance	Proprietary

SECTION 4: FIRST AID MEASURES

EYES: Immediately hold eyelids apart and flush eyes with plenty of water for 15 minutes. Seek medical attention.

SKIN: Immediately flush skin with mild soap and water for 15 minutes. Seek medical attention if irritation develops. Remove contaminated clothing and laundry before reuse.

INGESTION: **DO NOT INDUCE VOMITING!** If conscious, give 3-4 glasses of water to dilute and get immediate medical care.

INHALATION: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.

GENERAL INFORMATION: Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray, carbon dioxide, and dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate personnel to a safe area. Keep containers cool with water spray. Avoid breathing decomposition products. Wear self-contained breathing apparatus and full body protection.

UNUSUAL FIRE AND EXPLOSION HAZARDS: At temperatures above 60°C/140°F acid action on most metals may release hydrogen, a highly flammable and explosive gas.



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HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Evacuate area. Ventilate area. Collect for disposal. Clean up remaining materials from spill with suitable absorbent. **SMALL SPILLS:** Absorb with non-reactive absorbent (sand) and placed in suitable, covered, labeled containers. **LARGE SPILLS:** Provide diking or other appropriate containment to keep material from spreading. Prevent large spills from entering sewer or waterways. If diked material can be pumped, store recovered material in compatible drums for recovery or disposal. Observe all personal protection equipment recommendations.

PROTECTIVE EQUIPMENT: Use personal protective devices as stated in Section 8.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as Emergency Procedures.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING/ Keep container tightly closed. Store in fiberglass, polyethylene, or polypropylene containers. Do not store in metal containers, especially aluminum. Storage in certain metal containers at temperatures above 60°C/140°F may result in hydrogen gas evolution. Do not store at temperatures above 60°C/140°F.

STORAGE:

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN!! CAREFULLY READ ENTIRE LABEL BEFORE USE!

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>INGREDIENT</u>	<u>CAS NO.</u>
Organic Salt	506-89-8
Inorganic Salts	Proprietary
Fragrance	Proprietary

ENGINEERING CONTROLS: If current ventilation practices are not adequate for minimizing exposures, additional ventilation or exhaust systems may be required.

LOCAL EXHAUST: N/A

VENTILATION: N/A

RESPIRATORY PROTECTION: Not normally required if good ventilation is maintained. Avoid breathing vapor and/or mist.

EYE PROTECTION: Use chemical goggles or full face shield.

SKIN PROTECTION/PROTECTIVE GLOVES: Use impervious (rubber, nitrile) gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye Bath, Safety Shower, Full Protective Clothing.

WORK HYGIENIC PRACTICES: The usual precaution for the handling of chemicals must be observed. Wash thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-	
PHYSICAL STATE:	Clear, liquid
COLOR:	Amber
ODOR:	Potpourri fragrance
ODOR THRESHOLD:	N/A
pH:	1-2
BOILING POINT:	100°C (212°F)
FREEZING POINT:	<30°C



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FLASH POINT/METHOD USED:	N/A
EVAPORATION RATE:	N/A
FLAMMABILITY (solid, gas):	Not Flammable
VAPOR PRESSURE (mmHg):	N/A
VAPOR DENSITY (AIR = 1):	N/A
SPECIFIC GRAVITY (H ₂ O = 1):	1.02
DENSITY: (25°)	8.5
SOLUBILITY IN WATER:	Soluble (100% in water)
PARTITION COEFFICIENT, n-OCTANOL/WATER:	N/A
AUTO-IGNITION TEMPERATURE:	N/A
DECOMPOSITION TEMPERATURE:	N/A
VISCOSITY:	N/A

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: None

STABILITY: Stable

CONDITIONS TO AVOID: Heating above 110°C results in an exothermic decomposition with rapid release of CO₂ gas.

INCOMPATIBILITY (MATERIAL TO AVOID): Avoid contact with oxidizers. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorites (e.g. chlorine bleach, sulfides, or cyanides will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will generate heat.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): NA

SECTION 11: TOXICOLOGICAL INFORMATION

EYES: May cause eye irritation.

SKIN: Prolonged or repeated contact can cause irritation. **NON CORROSIVE TO SKIN:** (as defined and tested in accordance with the U.S. OSHA's Hazard Communication Standard, DOT Hazardous Material Regulations, Canada's WHMIS regulations and TDG Regulations. Classified as a mild skin irritant as per the 1992 OECD Guideline for Testing of Chemicals, Number 404 "Acute Dermal Irritation/Corrosion).

INGESTION:

This product may be harmful if ingested.

INHALATION: Not a likely route of exposure due to physical properties. Product has a low vapour pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Product can be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized.

CHRONIC EFFECTS:

SKIN: Prolonged or repeated exposure can cause drying, defatting, and dermatitis.

Carcinogenicity: Non-hazardous by OSHA criteria. Not listed by IARC, NTP, or ACGIH.

Teratogenicity, Mutagenicity, Reproductive Effects: This product was found not to be mutagenic when tested by the Ames Assay, (OECD Guidelines for Testing of Chemicals, Sec. 471).

Synergistic Materials: Not available.

Potential Environmental Effects: No



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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: 96 hour LC0>1400mg/L (rainbow trout) .48 hour LC50 711mg/L (ceriodaphnia dubia), 15 minute IC50, 16.23% effect at a concentration of 1mg/L (Vibrio fischeri, 4H6002)

Environmental Fate: Biodegradable

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Review federal, state and local government requirements prior to disposal.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): Quarts
PROPER SHIPPING NAME: COMPOUND, CLEANING LIQUID.
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OCCUPATIONAL HEALTH & SAFETY REGULATIONS:

OSHA: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

ENVIRONMENTAL REGULATORY LISTS:

SARA: Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of the ingredients are listed.

TOXIC SUBSTANCE CONTROL ACT (TSCA) : All the ingredients are listed on the Chemical Substance Inventory.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 0
Flammability = 0
Reactivity = 0
Other = -
Protection = B

REVISION DATE: 12/26/13

DISCLAIMER: While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.