



SAFETY DATA SHEET

Product: MARC 70 DRAIN LINE ROOT CONTROL

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 70 DRAIN LINE ROOT CONTROL

SDS DATE: 10/08/15

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: Root Control.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Causes serious eye damage. Skin irritation. Harmful if swallowed.

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: **DANGER:** Causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Very toxic to aquatic life, with long-lasting effects. Avoid release to the environment. Wash hands, forearms and face thoroughly with soap and water after handling. Wear protective gloves, clothing and eye protection. Avoid breathing mist. **IF SWALLOWED:** immediately call a Poison Center or physician. Do NOT induce vomiting unless directed to do so. **IF ON SKIN OR CLOTHING:** Immediately take off all contaminated clothing. Rinse skin with water. **IF INHALED:** Remove victim to fresh air and keep in a position comfortable for breathing. **IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 – 20 minutes. Call a Poison Center or physician.
(See Section 4 First Aid Measures for more information.)

POTENTIAL HEALTH EFFECTS: See Section 11 Toxicological Information for more information.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT.</u>
Copper (II) Sulfate Pentahydrate	7758-99-8	19.8%
Hydrochloric Acid	7647-01-0	0.1%-0.3%

SECTION 4: FIRST AID MEASURES

EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN OR/

CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control Center for doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. **DO NOT INDUCE VOMITING** unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably by mouth-to-mouth if possible Call a poison control center or doctor for further treatment advice.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: If you feel unwell, seek medical advice (show the label where possible).



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SECTION 5: FIRE FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire.
- UNSUITABLE EXTINGUISHING MEDIA:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.
- SPECIAL FIRE FIGHTING PROCEDURES/ PROTECTION:** Use water spray or fog for cooling exposed containers. Do not allow run-off from fire fighting to enter drains or water courses. Firefighters should not enter fire area without proper protective equipment, including respiratory protection.
- UNUSUAL FIRE AND EXPLOSION HAZARDS:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present. Product is not flammable. Product is not explosive.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Sulfur oxides. Copper compounds.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- EMERGENCY PROCEDURES:** Evacuate any unnecessary personnel. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Cautiously neutralize spilled liquid.
LIQUID SPILL: neutralize with powdered limestone or sodium bicarbonate. Clear up spills immediately and dispose of waste safely. Contact competent authorities after a spill.
- PROTECTIVE EQUIPMENT:** Equip cleanup crew with proper protective equipment (PPE) and clothing during clean-up. Ventilate area. Use personal protective devices as stated in Section 8.
- METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP:** Same as emergency procedures. Consult with local and state agencies for disposal of filled containers.
- ENVIRONMENTAL PRECAUTIONS:** Prevent entry to sewers and public waters.

SECTION 7: HANDLING AND STORAGE

- GENERAL HANDLING/ STORAGE:** Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep container closed when not in use. Store locked. Do not store on side. Comply with applicable regulations. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Comply with applicable regulations.
- OTHER PRECAUTIONS:** **KEEP OUT OF REACH OF CHILDREN!! CAREFULLY READ ENTIRE LABEL BEFORE USE.**

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- ENGINEERING CONTROLS/ VENTILATION:** Ensure adequate ventilation, especially in confined areas.
- RESPIRATORY PROTECTION:** If exposure limits are exceeded or irritation is experienced, wear NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U. S. State regulations.
- EYE PROTECTION:** Wear chemical safety goggles.
- SKIN PROTECTION/PROTECTIVE GLOVES:** Wear chemically resistant protective gloves.
- OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Wear suitable protective clothing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity.
- WORK HYGIENIC PRACTICES:** Use good hygiene practices when handling this material. Wash hands thoroughly after handling material. When using do not eat, drink or smoke..



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid
PHYSICAL STATE/COLOR: Clear, Blue
ODOR: Odorless
ODOR THRESHOLD: Not available.
pH: 2 – 2.1
SOLUBILITY IN WATER: Complete.
SPECIFIC GRAVITY: 1 - 16
FREEZING POINT: 28°F
MELTING POINT: Not applicable.
BOILING POINT: Not available.
FLASH POINT/METHOD USED: Not applicable.
METHOD USED: Not Applicable
UPPER FLAMMABILITY LIMITS (UEL): Not Applicable
LOWER FLAMMABILITY LIMITS (LEL): Not Applicable
EVAPORATION RATE: Not available.
VAPOR PRESSURE (mmHg): Not available.
VAPOR DENSITY at 20°C: Not available.
PARTITION COEFFICIENT, n-OCTANOL/WATER: N/A
AUTO-IGNITION TEMPERATURE: Not Applicable
DECOMPOSITION TEMPERATURE: Not available.
VISCOSITY: Not available.
EXPLOSION DATA – SENSITIVITY TO MECHANICAL IMPACT: Not expected to present an explosion hazard due to mechanical impact.
EXPLOSION DATA – SENSITIVITY TO STATIC DISCHARGE: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Thermal decomposition may generate corrosive vapors.
CHEMICAL STABILITY: Stable under recommended handling and storage conditions (see Section 7).
CONDITIONS TO AVOID: Direct sunlight. Extremely high or low temperatures. Incompatible materials.
INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, strong bases and strong oxidizers.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under thermal decomposition releases sulfur dioxide (SO₂), a toxic irritating gas.
HAZARDOUS POLYMERIZATION: Will not occur. **CONDITIONS TO AVOID (POLYMERIZATION):** None known.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Harmful if swallowed.

LD50 and LC50 Data:

ATE (oral)	500.0 mg/kg body weight
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SKIN CORROSION/IRRITATION: Causes severe skin burns and eye damage. (pH: 2 – 2.1)
SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye damage. (pH: 2 – 2.1)
RESPIRATORY OR SKIN SENSITIZATION: Not classified.
GERM CELL MUTAGENICITY: Not classified
TERATOGENICITY: Not classified
CARCINOGENICITY: Not classified
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Not classified
REPRODUCTIVE TOXICITY: Not classified
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Not classified
ASPIRATION HAZARD: Not classified
POTENTIAL ADVERSE HUMAN HEALTH EFFECTS AND SYMPTOMS: Harmful if swallowed.
SYMPTOMS/INJURIES AFTER INHALATION: May cause respiratory irritation.
SYMPTOMS/INJURIES AFTER INGESTION: Harmful if swallowed.
CHRONIC SYSTEMS: None expected under normal conditions of use.



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INFORMATON ON TOXICOLOGICAL EFFECTS – INGREDIENT(s)

LD50 and LC50 Data:

COPPER (II) SULFATE PENTAHYDRATE (1:1:5) (7758-99-8)	
LD50 Oral Rat	300 mg/kg

EYES: Causes serious eye irritation.

SKIN: Severe skin burns.

INGESTION: Harmful or fatal if swallowed.

INHALATION: May cause respiratory irritation.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

Ecology – general: This material is hazardous to the aquatic environment. Keep out of sewers and waterways

Ecology – water: Very toxic to aquatic life with long-lasting effects.

COPPER (II) SULFATE PENTAHYDRATE (1:1:5) (7758-99-8)	
LC50 Fish 1	0.66 -1.15 mg/l (Exposure time: 96 h – Species: Lepomis macrochirus [semi-static])
EC50 Daphnia 1	0.147 – 0.227 mg/l (Exposure time: 48 h – Species: Daphnia magna [static])
LC50 Fish 2	0.96 – 1.8 mg/l (Exposure time: 96 h – Species: Lepomis macrochirus [static])

PERSISTENCE AND DEGRADABILITY: Not Available.

BIOACCUMULATIVE POTENTIAL:

HYDROCHLORIC ACID (7647-01-0)	
BCF Fish 1	(no bioaccumulation)

MOBILITY IN SOIL: Not available.

OTHER ADVERSE EFFECTS:

Other Information: Avoid release to environment.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL RECOMMENDATIONS: Dispose of waste material in accordance with all local, regional and national regulations.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): DRUMS, PAILS
PROPER SHIPPING NAME: RQ, NA3082, OTHER REGULATED SUBSTANCES, LIQUID,N.O.S. (contains cupric sulfate)
HAZARD CLASS: 9
ID NUMBER: NA3082
PACKING GROUP: PGIII
LABEL STATEMENT: MISC HM 9

CONTAINER SIZES(S): QUARTS, GALLONS
PROPER SHIPPING NAME: WEED KILLING COMPOUND, DRY/LIQUID
HAZARD CLASS: NONE
ID NUMBER: NONE
PACKING GROUP: NONE
LABEL STATEMENT: NONE



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SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

SARA SECTION 311/312 HAZARD CLASSES	Immediate (acute) health hazard
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 1
Flammability = 0
Reactivity = 0
Other = -
Protection = -

REVISION DATE: 10/08/15

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.