



SAFETY DATA SHEET

Product: MARC 55 HEAVY DUTY DRAIN CLEANER

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 55 HEAVY DUTY DRAIN CLEANER

SDS DATE: 6/12/15

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: Drain/Sewer Cleaner.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: **CORROSIVE:** Contains sulfuric acid. May be fatal if swallowed. Causes severe burns to eyes and skin. May cause blindness.



SIGNAL WORD AND PRECAUTIONARY STATEMENTS: **DANGER:** Keep away from any possible contact with water, because of violent reaction unless adding to drain. If exposed or you feel unwell: Call a POISON CENTER or doctor/physician. Store locked up. Keep out of reach of children.

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT.</u>
Sulfuric Acid	7664-93-9	77-100

SECTION 4: FIRST AID MEASURES

GENERAL ADVICE: Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Do not breathe fume/gas/mist vapors/spray. Wash hands, face and skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician. If medical treatment must be delayed, repeat the flushing with tepid water or soak the affected area with tepid water to help remove the last traces of sulfuric acid.

SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower for 15 minutes (Pay particular attention to: folds, crevices, creases, groin). While patient is being transported to a medical facility, continue the application of cold, wet compresses. Wash contaminated clothing before reuse. Discard contaminated shoes. Seek immediate medical attention.

INGESTION: **DO NOT INDUCE VOMITING.** **Conscious and alert person:** Rinse mouth with water and give ½ to 1 cup of water or milk to dilute material. **Spontaneous vomiting:** Keep head below hips to prevent aspiration; Rinse mouth and give ½ to 1 cup of water or milk. **UNCONSCIOUS person:** **DO NOT INDUCE VOMITING** or give any liquid. **IMMEDIATELY CALL PHYSICIAN OR POISON CONTROL CENTER TO OBTAIN MEDICAL ATTENTION.**

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Take precautions to avoid secondary contamination by residual acids. Difficult breathing: Give oxygen. Immediately call A POISON CENTER or doctor/physician.



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OTHER HAZARDS: Extremely corrosive. Harmful or fatal if swallowed. Harmful if inhaled. Severe eye and skin irritation. Possibility of damage to the upper respiratory tract and lung tissues.

ENVIRONMENTAL HAZARD: Strong acid. Highly toxic to plants and to aquatic organisms.

SAFETY PHRASE: Store locked up. Never add water to this product. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Treat symptomatically. Symptoms may be delayed. If medical treatment must be delayed, repeat the flushing with tepid water or soak the affected area with tepid water to help remove the last traces of sulfuric acid. Creams or ointments **SHOULD NOT** be applied before or during the washing phase of the treatment. Call a physician if irritation persists. Wash contaminated clothing before reusing.

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: When material is not involved in fire, do not use water on material itself. Expect violent reaction with water.

Small Fire: Dry chemical or CO₂. Move containers from fire area if you can do it without risk.

Large Fires: Flood fire area with large quantities of water (from a distance), while knocking down vapors with water fog. If insufficient water supply: knock down vapors only.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus and full firefighting turnout gear. Move containers from fire area if you can do it without risk.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Hazardous combustion products: Releases of sulfur dioxide at extremely high temperatures. **FIRE HAZARD:** Not flammable. **EXPLOSION HAZARD:** Reacts with most metals, especially when dilute: Hydrogen gas release (Extremely flammable, explosive). Evacuate personnel to a safe area. Keep upwind of fire.

HAZARDOUS DECOMPOSITION PRODUCTS: Possibility of decomposition if heated and in contact with sources of ignition. Release of toxic gases and vapors (Sulfur oxides (SO₂, SO₃)).

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Ensure adequate ventilation, especially in confined areas. Ventilate affected area. Do not touch damaged container or spilled material unless wearing appropriate protective clothing. Wear protective gloves/protective clothing and eye/face protection. Use personal protective devices as stated in Section 8.

EMERGENCY RESPONDERS: Keep unnecessary personnel away. Evacuate personnel to a safe area and upwind of fire. Use personal protective devices as stated in Section 8.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not contaminate water.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Dike large spills, and cautiously dilute and neutralize with lime or soda ash, and transfer to waste water treatment system. Prevent liquid from entering storm sewers, waterways, or low areas. Clean up in accordance with all applicable regulation. See Section 13 for Waste Disposal.

SECTION 7: HANDLING AND STORAGE



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GENERAL/SAFE HANDLING:

DO NOT get in eyes, on skin, or on clothing. Avoid breathing vapors or mist. Wear approved respirators if adequate ventilation cannot be provided. Wash thoroughly after handling. Ingestion or inhalation: Seek medical advice immediately and provide medical personnel with a copy of the SDS. **NEVER** add water to acid. Avoid aerosol formation.

GENERAL HYGIENE CONSIDERATIONS:

Use personal protection recommended in Section 8. Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

OTHER PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN!! STORE LOCKED UP. CAREFULLY READ ENTIRE LABEL BEFORE USE.

STORAGE:

Store in original container. **DO NOT** add water or other products to contents in containers as violent reactions will result with resulting high heat, pressure and/or generation of hazardous acid mists. Store locked up. Keep containers away from heat, sparks, and flame. Containers that have been opened must be closed and kept upright to prevent leakage. **DO NOT STORE IN UNLABELED CONTAINERS.**

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

CHEMICAL NAME	ACGIH (U.S.A.) TLV-TWA (mg/m ³)	OSHA (U.S.A.) PEL-TWA (mg/m ³)
Sulfuric acid 7664-93-9	0.2	1

ENGINEERING CONTROLS/ VENTILATION:

Good general ventilation should be provided to keep vapor and mist concentrations below the exposure limits.

OTHER:

None

RESPIRATORY:

Appropriate NIOSH respiratory protection if acid mist is present.

EYE PROTECTION:

Chemical splash goggles.

SKIN PROTECTION/PROTECTIVE GLOVES:

Acid-proof gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Boots, long sleeve clothing under an acid proof suit. An apron can be used in place of acid proof suit in a laboratory environment.

WORK HYGIENIC PRACTICES:

Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling, after each work shift, before eating, smoking or using the toilet. Promptly remove contaminated clothing. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



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APPEARANCE- PHYSICAL STATE/COLOR:	Oily, clear, liquid Light yellow
ODOR:	Odorless
pH:	<1
SOLUBILITY IN WATER:	Miscible
SPECIFIC GRAVITY:	1.837
MELTING POINT/FREEZING POINT:	-31°F (-35°C)
BOILING POINT:	535°F (279°C)
FLASH POINT/METHOD USED:	No information available.
EVAPORATION RATE:	No information available.
FLAMMABILITY (solid, gas):	No information available.
FLAMMABILITY LIMITS:	
Upper flammability limit:	No information available.
Lower flammability limit:	No information available.
VAPOR PRESSURE (mmHg):	<0.3 mmHg @ 25°C (77°F) <0.6 mmHg @ 38°C (100°F)
VAPOR DENSITY (AIR = 1):	No information available.
PARTITION COEFFICIENT:	No information available.
AUTO-IGNITION TEMPERATURE:	No information available.
DECOMPOSITION TEMPERATURE:	No information available.
KINEMATIC VISCOSITY:	No information available.
DYNAMIC VISCOSITY:	22.5 cP at 20°C (68°F) For Sulphuric acid 93%
EXPLOSIVE PROPERTIES:	Not explosive.
OXIDIZING PROPERTIES:	Not an oxidizer.
DENSITY:	1.837

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Reacts violently with water, organic substances and base solutions with evolution of heat and hazardous mists.

STABILITY: Stable under normal conditions, at ambient temperatures.

CONDITIONS TO AVOID: Heat, sources of ignition.

INCOMPATIBILITY (MATERIAL TO AVOID): Vigorous reactions with water, alkaline solutions, metals, metal powder, carbides, chlorates, fulminates, nitrates, picrates, strong oxidizing, reducing, or combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides. Sulfuric acid reacts with metal to produce hydrogen, a flammable and potentially explosive gas. Hydrogen reacts with sulfides and generates hydrogen sulfide (Highly toxic gas). NEVER add water directly to product because a violent exothermic reaction may occur.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Possibility of decomposition if heated and in contact with sources of ignition. Release of toxic gases and vapors (sulfur oxides (SO₂, SO₃)).

HAZARDOUS POLYMERIZATION: Does not occur.

CONDITIONS TO AVOID (POLYMERIZATION): None known.

SECTION 11: TOXICOLOGICAL INFORMATION



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Routes of entries: Ingestion, Inhalation, Skin and eye contacts.

ACUTE TOXICITY: ORAL acute (LD50): 2 140 mg/kg (Rat). INHALATION: acute (LC50, 2 hours): 510 mg/m³ (Rat); 320 mg/m³ (Mouse). (RTECS).

ACUTE EFFECTS: May be fatal if inhaled or ingested in large quantity. Liquids or acid mists: May produce tissue damage; Mucous membranes (Eyes, mouth, respiratory tract). Extremely dangerous by eyes (conjunctivitis, permanent eye damage) and skin contact (Corrosive) (Severe skin burns, scars). Severe irritant for eyes: inflammation (Redness, watering, itching). Very dangerous in case of inhalation at high concentrations (Mists): May produce severe irritation of respiratory tract (Coughing, shortness of breath, choking). Maintain observation of the patient for delayed onset of pulmonary edema.

CHRONIC EFFECTS: Target organs for acute and chronic overexposure (NIOSH 90-117): Respiratory system, eyes, skin, teeth.

EYES: Risk of serious damage to eyes. Effects of exposure on eye may include pain, redness, severe deep burns and loss of vision. Possibility of corrosion or ulceration (Blindness may result).

SKIN: Possibility of corrosion, burns or ulcers.

INGESTION: Immediate effects of overexposure: Burns of the mouth, throat, esophagus and stomach, with severe pain, bleeding, vomiting, diarrhea and collapse of blood pressure. Damage may appear days after exposure.

INHALATION: At high concentrations (mists) may produce severe irritation of respiratory tract (coughing, shortness of breath, choking). Watch for delayed onset of pulmonary edema.

IRRITATION-SENSITIZATION: Severe irritation: 5 mg/30 s, rinsing (eyes, rabbit). (RTECS). Sensitization: Not known.

GERM CELL MUTAGENICITY: Cytogenetic analysis: 4 mmol/l (ovaries, Hamster). (RTECS).

CARCINOGENICITY: Classification not applicable to sulfuric acid and sulfuric acid solutions.

REPRODUCTIVE TOXICITY: Inhalation (Lo CT); 20 mg/m³/7 hour (6-18 days pregnant) reproductive effects: specific developmental abnormalities (Musculoskeletal system) (Rabbit). (RTECS).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

Aquatic toxicity: Slightly to moderately toxic.

Toxicity to aquatic life increases with lower pH. At pH lower than 5, only a few fish species can survive and at pH lower than 4, aquatic life is rare.

Chemical Name	Algae/aquatic plants	Fish	Crustacean
Sulfuric acid	-	Bluegill Sunfish (<i>Lepomis macrochirus</i>) 16 mg/l (LC50; 48 hours)	Flea water (<i>daphnia magna</i>) >100 mg/l. (EC50, 48 h)

EYE: Concentrated compound is corrosive.

SKIN: Concentrated compound is corrosive.

Single and repeated exposure: Irritation of the respiratory tract; Corrosion of the respiratory tract; Lung damage; Labored breathing; Altered respiratory rate: Pulmonary edema.

PERSISTENCE AND DEGRADABILITY: Sulfate ion: Ubiquitous in the environment. Metabolized by micro-organisms and plants.

BIOACCUMULATIVE POTENTIAL: The product is not bioaccumulating.



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Sulfate ion: Ubiquitous in the environment. Metabolized by micro-organisms and plants without bioaccumulation.

MOBILITY IN SOIL: Easy soil seeping under rain action.

MOBILITY: The product is water soluble and may spread in water systems.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): Pails
PROPER SHIPPING NAME: SULFURIC ACID
HAZARD CLASS: 8
ID NUMBER: UN1830
PACKING GROUP: PGII
LABEL STATEMENT: Corrosive

CONTAINER SIZE (S): Quarts
PROPER SHIPPING NAME: COMPOUND, CLEANING LIQUID
HAZARD CLASS: None
ID NUMBER: None
PACKING GROUP: None
LABEL STATEMENT: Limited Quantity Symbol

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

USA CERCLA Section 103 Hazardous substances (40 CFR 302.4)

SARA TITLE III SECTION 302: (Extremely Hazardous Substance List): (40 CFR 355) : Yes

SARA SECTION 311/312 HAZARD CATEGORIES: Acute Health

SARA TITLE III SECTION 313 TOXIC CHEMICALS (40 CFR 372.65)

US: TSCA INVENTORY: Listed: sulfuric acid (RQ) : 1000 POUNDS (454 kg)

TSCA (EPA, Toxic Substance Control Act) Chemical Inventory (40 CFR7 10): Listed.

Classifications HCS Corrosive liquid

Persistent Organic Pollutants: Not applicable.

Ozone-depleting substances (ODS) regulation: Not applicable.
(EC) 1005/2009

INTERNATIONAL INVENTORIES

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 3



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Flammability = 0
Reactivity = 2
Other = -
Protection = -

EMPLOYEE TRAINING: See Section 2 for Risk & Safety Statements and Section 8 for Personal Protection. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

REVISION DATE: 6/12/15

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.