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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 217-L LIQUID BOILER SCAVENGER

SDS DATE: 02/17/16

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: Boiler Oxygen Scavenger.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Causes eye irritation.

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: WARNING: Causes serious eye irritation.

PRECAUTIONARY: PREVENTION: Wash skin thoroughly after handling. Wear eye protection./face protection. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory

disease should use extra cautions in handling this product. Sulfite-sensitive individuals may experience a severe allergic reaction. This product in contact with heat, acids, or oxidizing agents

releases sulfur dioxide gas which may be harmful or deadly when inhaled.

See Section 4 FIRST AID MEASURES. Harmful to aquatic life.

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

COMPONENT	CAS NO.	WT. %
Sodium Sulfite	7757-83-7	5% - 15%

SECTION 4: FIRST AID MEASURES

EYES: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine). Remove contact lenses, if present and easy to do. Continue rinsing. GET

MEDICAL ATTENTION IMMEDIATELY.

SKIN: Wash skin thoroughly after handling. If skin irritation persists or you feel unwell get medical advice/attention.

INGESTION: Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION: Remove to fresh air. Give oxygen or artificial respiration if needed. Call a doctor immediately if allergic signs,

particularly in the respiratory tract, are observed.

MOST IMPORTANT SYMPTOMS/EFFECTS BOTH ACUTE AND DELAYED:

IN CASE OF INHALATION:

SYMPTOMS: Headache, breathing difficulties, cardiac irregularities, loss of consciousness and cardiopulmonary arrest. Persons

with a history of asthma, allergies, chronic or recurrent respiratory disease should use extra cautions in handling this product. Sulfite-sensitive individuals may experience a severe allergic reaction. This product in contact with heat,

acids, or oxidizing agents releases sulfur dioxide gas which may be harmful or deadly when inhaled.

EFFECTS: Mild respiratory irritant, may cause severe allergic respiratory reaction, breathing of dust may aggravate Asthma or

other pulmonary diseases.

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EYE EFFECTS: Moderate eye irritation.

SKIN: Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory

disease should use extra cautions in handling this product.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: Sulfite-sensitive individuals may experience a severe allergic reaction. This product in contact with heat, acids, or oxidizing agents releases sulfur dioxide gas which may be harmful or deadly when inhaled.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment.

SPECIAL FIRE FIGHTING EQUIPMENT/

PROCEDURES: Wear self-contained breathing apparatus and protective suit. Use NIOSH approved respiratory

protection. Approach from upwind.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not combustible.

HAZARDOUS COMBUSTION PRODUCTS: Sulphur dioxide, sulfur oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Collect the product with suitable means. Keep in suitable, closed containers for disposal. See

Section 13, Disposal Considerations, for additional information.

ENVIRONMENTAL PRECAUTIONS: The product should not be allowed to enter drains, water courses or the soil. In case of accidental

release or spill, immediately notify the appropriate authorities if required by Federal, State/Provincial

and local laws and regulations. Do not flush into surface water or sanitary sewer system.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as EMERGENCY PROCEDURES.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING/

STORAGE: Use only in well-ventilated areas. Avoid prolonged or repeated contact with skin. Persons with a history of skin

sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should use extra cautions in handling this product. Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. (See Section 8 EXPOSURE CONTROL/PERSONAL PROTECTION.)

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

SPECIFIC END USE(S): Sulfite-sensitive individuals may experience a severe allergic reaction. This product in contact with heat, acids,

or oxidizing agents releases sulfur dioxide gas which may be harmful or deadly when inhaled.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS: Contains no substances with occupational exposure limit values.

ENGINEERING CONTROLS/VENTILATION: Ensure adequate ventilation. Provide appropriate exhaust ventilation at machinery

and at places where dust can be generated.

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators. In the case of vapor formation use a respirator with an approved filter. Use NIOSH approved respiratory protection. In case of dust or aerosol formation use respiratory with

an approved filter.

EYES AND FACE PROTECTION: Chemical resistant safety goggles must be worn.

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SKIN PROTECTION/PROTECTIVE GLOVES: Wear preventive skin protection.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear suitable protective clothing to minimize skin contact. Wash

contaminated clothing before re-use.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practices. Wash hands and affected

skin immediately after handling, before breaks, and at the end of the workday. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-

PHYSICAL STATE: Liquid.

COLOR: Clear, colorless.
ODOR: Odorless.
ODOR THRESHOLD: No data available.

DECOMPOSITION TEMPERATURE: No data available.

 pH:
 9

 MELTING POINT:
 N/A

 FREEZING POINT/RANGE:
 25°F

 BOILING POINT/RANGE:
 212°F

VOLATILITY:

EVAPORATION RATE:

FLASH POINT/METHOD USED:

No data available.

None.

FLAMMABILITY (solid, gas):

FLAMMABILITY/EXPLOSIVE LIMIT:

Not applicable.

EXPLOSIVE PROPERTIES: None.

OXIDIZING PROPERTIES:

FLAMMABILITY LIMITS:

VAPOR PRESSURE (mmHg):

VAPOR DENSITY (AIR = 1):

Oxygen scavenger.

Not Flammable.

No data available.

No data available.

SPECIFIC GRAVITY (H2O = 1): 1.09

SOLUBILITY IN WATER: Completely mixes with water.

PARTITION COEFFICIENT (N-OCTANOL/WATER): N

THERMAL DECOMPOSITION: >= 1112°F (>=600°C AUTO-IGNITION TEMPERATURE: No data available. VISCOSITY: No data available. MOLECULAR WEIGHT: 126.04 g/mol

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: No data available

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Heat, exposure to moisture.

INCOMPATIBILITY (MATERIAL TO AVOID): Water, acids, oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Sulphur dioxide, sulfur oxides.

HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID (POLYMERIZATION): NA

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICITY:

ACUTE ORAL TOXICITY: LD50: 820 mg/kg - Mouse

LD50: >2,000 mg/kg - Rat

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ACUTE INHALATION TOXICITY: No data available.

ACUTE DERMAL TOXICITY: No data available.

ACUTE TOXICITY (OTHER

ROUTES OF ADMINISTRATION): No data available.

SKIN CORROSION/IRRITATION: Rabbit – No skin irritation.

SERIOUS EYE DAMAGE/

EYE IRRITATION: Rabbit – Eye irritation

RESPIRATORY OR SKIN

SENSITIZATION: No data available.

MUTAGENICITY:

GENOTOXICITY IN VITRO: In vitro tests showed mutagenic effects.

GENOTOXICITY IN VIVO: No data available.

CARCINOGENICITY: No data available.

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP, IARC, OSHA, ACGIH

TOXICITY FOR REPRODUCTION AND DEVELOPMENT:

TOXICITY TO REPRODUCTION/

FERTILITY: No data available.

DEVELOPMENTALTOXICITY/

TERATOGENICITY: No data available.

STOT

STOT – SINGLE EXPOSURE: No data available.

STOT – REPEATED EXPOSURE: No data available.

ASPIRATION TOXICITY: No data available.

FURTHER INFORMATION: Harmful if swallowed.

Moderate eye irritation.

May cause sensitization of susceptible persons by inhalation of aerosol or dust.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

AQUATIC COMPARTMENT:

ACUTE TOXICITY TO FISH: LC50 – 96 h: 100 mg/l – Carassius auratus (goldfish)

PERSISTENCE AND DEGRADABILITY:

BIODEGRADATION: Method: Biochemical Oxygen Demand (BOD) instantaneous reaction.

BIOACCUMULATIVE POTENTIAL:

BIOCONCENTRATION FACTOR (BCF): Bioaccumulative potential.

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MOBILITY IN SOIL:

RESULTS OF PBT AND vPvB ASSESSMENT:

No data available.

OTHER ADVERSE EFFECTS:

No data available.

REMARKS: Oxygen scavenger, Ecological injuries are not known or expected under normal use.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): PAILS & DRUMS

PROPER SHIPPING NAME: COMPOUNDS, BOILER CLEANSING.

HAZARD CLASS: NONE
ID NUMBER: NONE
PACKING GROUP: NONE
LABEL STATEMENT: NONE

SECTION 15: REGULATORY INFORMATION

NOTIFICATION STATUS: INVENTORY INFORMATION

United States TSCA Inventory: Listed on inventory.

FEDERAL REGULATIONS:

U.S. EPA EPCRA SARA Title III

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)

Fire Hazard – No
Reactivity Hazard - No
Sudden Release Pressure Hazard – No
Acute Health Hazard – Yes
Chronic Health Hazard – Yes

SECTION 313 TOXIC CHEMICALS (40CFR 372.65):

This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.

SECTION 302 EMERGENCY PLANNING EXTREMELY HAZARDOUS SUBSTANCE THRESHOLD PLANNING QUANTITY (40 CFR 355): No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SECTION 302 EMERGENCY PLANNING EXTREMELY HAZARDOUS SUBSTANCE REPORTABLE QUANTITY (40 CFR 355):

This material does not contain any components with a SARA 302 RQ.

SECTION 304 EMERGENCY RELEASE NOTIFICATION REPORTABLE QUANTITY (40 CFR 355):

This material does not contain any components with a section 304 EHS RQ.

U.S. EPA CERCLA HAZAROUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

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STATE REGULATIONS

U.S.CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65)

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health =

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

REVISION DATE: 02/17/16

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.