RAMSEY®

MATERIAL SAFETY DATA SHEET

CAST IRON Rust Remover

Date Prepared: Date Revised:

10/07/1997 10/08/1997

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/Use: CAST IRON Rust Remover

MANUFACTURER

The Ramsey Company 120 Bartlett Street Marlborough, MA 01752-3065 Ramsey Telephone Number:

800-421-2768

Emergency Telephone (24 hours): 800-228-5635 Ext 118

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS NO.	% BY WEIGHT	OSHA PEL/STEL	ACGIH TLV/STEL
Inorganic salt, NJ Trade Secret Registry #69730001	NA	15 – 40	NE	NE
Sodium hydrosulfite	7775-14-6	15 – 40	15 mg/m3 (total dust) / 5 mg/m3 (respirable)	' 10 mg/m3 (total dust) / 3 mg/m3 (respirable)
Sodium bisulfite	7631-90-5	15 - 40	5 mg/m3	5 mg/m3
Sodium carbonate	497-19-8	3 - 7	NE	NE
Sodium sulfite	7757-83-7	3 – 7	15 mg/m3 (total dust) / 5 mg/m3 (respirable)	10 mg/m3 (total dust) /3 mg/m3 (respirable)
Carboxylic acid	NA	3 – 7	NE	NE

NA - Not Applicable NE - Not Established

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

White, Powder Solid. Slight, Sulfur Odor. Harmful if Swallowed. May Cause Severe Eye Irritation and Skin Irritation. May Cause Respiratory Tract Irritation. May Cause Allergic Respiratory Reactions In Sensitive Individuals. Contact With Acids Releases Sulfur Dioxide Gas.

POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological Information)

PRIMARY ROUTE(s) OF EXPOSURE: _X_ Eye _X_ Skin Contact ___ Skin Absorption _X_ Ingestion

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES:

Causes severe eye irritation. Symptoms may include pain, tearing, redness, and clouding of the eye surface.

SKIN

Causes skin irritation. Symptoms may include redness, rash and mild swelling.

INGESTION:

Harmful if swallowed. May cause mouth, throat and stomach irritation. Symptoms may include nausea, vomiting and diarrhea. Ingestion may cause allergic asthmatic reactions in some individuals.

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INHALATION

High concentrations of dust or mist, or sulfur dioxide released from this product, may cause nose, throat and respiratory tract irritation. Symptoms may include coughing, wheezing and shortness of breath. May cause allergic respiratory reactions in some individuals.

EFFECTS OF CHRONIC EXPOSURE

Prolonged contact may cause severe skin irritation. Symptoms may include pain, redness, rash, and swelling.

MEDICAL CONDITIONS AGGRAVATED:

May aggravate pre-existing eye, skin and respiratory conditions. Persons suffering from asthma should avoid exposure to this product.

4. FIRST AID MEASURES

EYES:

Immediately flush eyes with plenty of water while holding eyelids apart. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not put any medication in the victim's eyes unless instructed by a physician. Get immediate medical attention.

SKIN:

Flush with water, then wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops.

INGESTION:

Do not induce vomiting. Drink large quantities of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

INHALATION:

Remove to fresh air. If not breathing, give respiration; if breathing is difficult, give oxygen (by trained personnel only). Get immediate medical attention.

FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: Not applicable

FLAMMABLE LIMITS:

Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable

EXTINGUISHING MEDIA:

Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS:

Normal products of combustion (carbon monoxide and carbon dioxide), oxides of sulfur and oxides of sodium.

FIRE AND EXPLOSION HAZARDS:

Product may ignite or explode on contact with oxidizing materials. Heat may be given off on contact with water and may ignite combustible materials.

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FIRE FIGHTING INSTRUCTIONS:

This product is not flammable. As in any fire, MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear should be worn.

6. ACCIDENTAL RELEASE MEASURES

See Section 8, Exposure Controls/Personal Protection and Section 3, Hazard Identification. Isolate spill and keep non-essential personnel from entering spill area. Avoid dust formation. Using non-metallic implements, collect by carefully scooping or shoveling into a suitable dry container.

7. HANDLING AND STORAGE

HANDLING:

Follow label use directions. Do not mix with other chemicals unless instructed by label directions. Avoid contact with eyes, skin and clothing. Minimize dust generation. Avoid breathing dust. Wash thoroughly after handling. Remove contaminated clothing. Wash clothing and equipment before reuse.

STORAGE:

Keep container closed when not in use. Store in a dry area away from incompatible materials. (See Section 10, Stability and Reactivity).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

General room ventilation is expected to be adequate. If user operations generate dust, ventilation should be used to keep airborne concentrations below exposure limits (See Section 2, Composition/Information on Ingredients).

PERSONAL PROTECTION

EYE:

Where eye contact is possible, wear safety glasses with side shields or chemical splash goggles (ANSI Z87.1 approved).

SKIN:

Where skin contact is possible, chemical-resistant clothing (e.g., gloves) should be worn.

RESPIRATORY:

No respiratory protection is required if general room ventilation is adequate and airborne concentrations are kept below exposure limits. When exposure limits are exceeded, use appropriate respiratory protection (NIOSH/MSHA) to prevent overexposure. For dust, use an approved dust respirator.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Slight, Sulfur

APPEARANCE: White, Powder pH: 5-6 {saturated solution}

PERCENT VOLATILE BY WEIGHT: Not Applicable

VAPOR PRESSURE: Not Applicable VAPOR DENSITY: Not Applicable BOILING POINT: Not Applicable

FREEZING/MELTING POINT: Not Determined

SOLUBILITY IN WATER: Complete EVAPORATION RATE: Not Applicable

SPECIFIC GRAVITY: 1.30 VISCOSITY: Not Applicable

OCTANOL/WATER PARTITION COEFFICIENT: Not Determined

ODOR THRESHOLD: Not Determined

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID):

Slowly oxidized upon exposure to air and moisture.

POLYMERIZATION:

Will not occur.

HAZARDOUS DECOMPOSITION:

Sulfur dioxide.

INCOMPATIBLE MATERIALS:

Oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid), reactive metals (e.g., aluminum), and moisture. Contact with acids releases sulfur dioxide gas

11. TOXICOLOGICAL INFORMATION

ACUTE DATA:

No data is available for this product. The following data are available for product ingredients:

PRODUCT/INGREDIENT	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC50 (rat)	
Sodium hydrosulfite	2500 mg/kg	10000 mg/kg	Not Available	
Sodium bisulfite	3200 mg/kg	Not Available	1260 ppm (4-hr, SO2)	
Sodium carbonate	4090 mg/kg	Not Available	2300 mg/m3 (2-hr)	
Sodium sulfite	2160 mg/kg	Not Available	Not Available	

SENSITIZATION DATA: No data available

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CHRONIC DATA:

No data available.

REPRODUCTIVE/TERATOGENIC DATA:

No data available.

CARCINOGENIC/MUTAGENIC DATA:

Not listed as carcinogenic by NTP, IARC, or ACGIH or regulated as a carcinogen by OSHA.

SYNERGISTIC MATERIALS:

No data available.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, state or provincial and federal regulations. The unused product, as manufactured, is a RCRA non-hazardous waste in accordance with 40 CFR 261. The product has not been evaluated by the Toxicity Characteristic Leachate Procedure (TCLP). According to RCRA, it is the responsibility of the waste generator to ensure proper disposal.

14. TRANSPORT INFORMATION

DOT/TDG HAZARDOUS MATERIAL DESCRIPTION: Not regulated

15. REGULATORY INFORMATION

Not meant to be all-inclusive—selected regulations represented.

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Under 40 CFR 370.2, this product meets the following hazard categories: Immediate, Reactive.

313 REPORTABLE INGREDIENTS: Ingredients in this product are not currently subject to notification.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT) CERCLA REGULATORY: Not reportable under CERCLA.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: This product complies with all TSCA inventory requirements.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM).

Class D-Division 2B, eye and skin irritant. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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16. OTHER INFORMATION

HMIS RATING

HEALTH	-	2
FLAMMABILITY	1	
REACTIVITY	1	
PERSONAL PROTECTION	-	

FIRE 1 HEALTH REACTIVITY **SPECIAL**

NFPA RATING

MSDS STATUS

Revision #: 1

This MSDS replaces the October 07, 1997 MSDS. Any changes in information are as follows:

HMIS Health HMIS Reactivity NFPA Health NFPA Reactivity

APPROVED BY: EH&S/Regulatory Affairs APPROVAL DATE: 10/08/1997

The information on this data sheet represents our current data and best opinion as to the proper use in handling of the product under normal foreseeable conditions. Any use of this product which is not in conformance with this data sheet or product label, or which involves using the product in combination with any other product or any other process is the responsibility of the user.