



Rust Inhibitor Material Safety Data Sheet - MSDS

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RENEGADE RUST INHIBITOR

SECTION I-GENERAL

Trade Name Renegade By Service Line
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Reedsburg, WI 53959
Phone (608) 524-0204
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SECTION II-HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT/CAS #	ACGIH TLV	OSHA PEL	% WT	NOTES
MONOETHANOLAMINE			<15%	1
H2O			85%	NA

NOTE 1 - Section 313 Supplier Notification: "1" identifies chemical ingredients subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986. This information should be included in all MSDS's that are copied and distributed for this material.

SECTION III-HAZARDS IDENTIFICATION

Emergency Overview

Color: Colorless
Physical State: Liquid
Odor: Ammoniacal

Hazards of product:

DANGER! Causes severe eye burns. Causes severe skin burns. Causes burns of the mouth and throat. Harmful if absorbed through skin. May be harmful if inhaled. May be harmful if swallowed. Aspiration hazard. Can enter lungs and cause damage. Evacuate area. Keep upwind of spill.

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Contact: Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage. Classified as corrosive to the skin according to DOT guidelines.

Skin Absorption: Prolonged or widespread skin contact may result in absorption of harmful amounts.

Inhalation: Prolonged excessive exposure may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration. Swallowing may result in burns of the mouth and throat.

Aspiration hazard: Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

Effects of Repeated Exposure: In animals, effects have been reported on the following organs: Kidney. Liver.

Birth Defects/Developmental Effects: Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

SECTION IV-FIRST AID MEASURES

Eye Contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

Skin Contact: Immediate continued and thorough washing in flowing water for at least 30 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash clothing before reuse. Properly dispose of leather items such as shoes, belts, and watchbands.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Ingestion: Do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Do not give anything by mouth to an unconscious person.

Notes to Physician: Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest UNIVAR USA INC. MSDS NO:DZ75482
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Annotation: endotracheal/esophageal control if lavage is done. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION V-FIRE FIGHTING MEASURES

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective Firefighting clothing (includes Firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant Firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Carbon monoxide. Carbon dioxide.

SECTION VI- ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled:

Small spills: Dilute with water. Absorb with materials such as: Non-combustible material. Sand. Clay. Vermiculite. Zorb-all. Collect in suitable and properly labeled containers. **Large spills:** Contain spilled material if possible. Dilute with water. Pump into suitable and properly labeled containers.

Personal Precautions: Evacuate area. Refer to Section 7, Handling, for additional precautionary measures. Keep upwind of spill. Ventilate area of leak or spill. Only trained and properly protected personnel must be involved in clean-up operations. Use appropriate safety equipment.

For additional
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Annotation: Information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

SECTION VII-HANDLING AND STORAGE

Handling

General Handling: Do not get in eyes, on skin, on clothing. Avoid breathing vapor. Do not swallow. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Other Precautions: Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto ignition temperatures possibly resulting in spontaneous combustion.

Storage

Monoethanolamine can react with iron to form an unstable material that can decompose at temperatures above 130 deg C in air. Use caution when thawing drummed material. If steam heating is necessary, use only low pressure steam and stainless steel coils. Store in a dry place.

Do not store in: Zinc. Aluminum. Copper. Copper alloys. Galvanized containers.

Storage Period:

Bulk - 6 Months

Plastic drums - 24 Months

SECTION VIII-EXPOSURE CONTROLS, PERSONAL PROTECTION

Ventilation: General or local to avoid exposure to irritating mists if mists are generated.

Respirator: None normally required. NIOSH/MSHA approved respirator where conditions may cause exposure limits to be exceeded from mists of product or solution.

Eye Protection: Glasses, goggles, or face shield where conditions may cause eye exposure.

Protective Clothing: Chemical resistant, impermeable gloves as needed to prevent excessive contact. Full body covering and shoes as needed to prevent excessive contact.

Other Protective Equipment or Measures: Eye wash stations or running water in the work area.

SECTION IX- PHYSICAL AND CHEMICAL PROPERTIES

Color - Colorless

Odor - Ammoniacal

Odor Threshold - No test data available

Flash Point - Closed Cup - 96 deg C (205 deg F) ASTM D93

Flammability (solid, gas) - No

Flammable Limits In Air - Lower: 3.0 %(V) Literature - Upper: 23.5 %(V) Literature

Auto ignition Temperature - No test data available

Vapor Pressure - < 0.13 kPa @ 20 deg C Literature

Boiling Point - (760 mmHg) 170 deg C (338 deg F) Literature .
Vapor Density - (air = 1) 2.1 Literature
Specific Gravity - (H2O = 1) 1.017 Literature
Freezing Point - 10.5 deg C (50.9 deg F) Literature
Melting Point - No test data available
Solubility in Water - (by 100 % Literature weight)
pH - 12.6 (@ 25 g/l) Literature

SECTION X-STABILITY AND REACTIVITY

Stability/Instability

Stable under recommended storage conditions. See Storage, Section 7. Hygroscopic.
Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose. Avoid moisture.

Incompatible Materials: Avoid contact with: Strong acids. Strong oxidizers.

Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases Corrosive when wet.

Heating above 60 deg C in the presence of aluminum can result in corrosion and generation of flammable hydrogen gas. Avoid unintended contact with: Halogenated hydrocarbons.

Hazardous Polymerization

Will not occur.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials.

HMIS RATING

Health.....2

Fire.....0

Reactivity.....0

DISCLAIMER

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for and loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.