



MATERIAL SAFETY DATA SHEET



Rust Remover

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Section 1

Product & Company Identifications

Product Name: Rust Remover

Product Use: Removal of rust, hard water minerals, salts, etc.

WHMIS Classification: Class E

Manufacturer: ORANGE-SOL Blending & Packaging, Inc.

1400 N. Fiesta Blvd., Bldg. 100

Gilbert, AZ 85233-1023

For Information & Emergencies: (480) 497-8822 (7 am-5pm, Mon-Fri MST) www.orange-sol.com

Preparation Date: 22 Jul 2003

Revision Date: 12 Nov 2014

MSDS #: 50599-254

Section 2

Information on Ingredients

Product Mixture: No hazardous ingredients as per OSHA, 29CFR 1910.1200.

Components: This section is proprietary.

Section 3

Hazardous Identification

Emergency Overview: Avoid inhalation of mist and contact with eyes.

Primary Routes of Contact: Ingestion, inhalation, and absorption.

Physical Hazard: None established.

Health Hazard

Eye: Causes burns to the eyes. **Acute eye irritation/corrosion test:** This product was found to be Corrosive to the eyes when tested using the Modified Draize method (OECD Guidelines for Testing of Chemicals, Sec. 4-5, 1992).

Skin: Repeated or prolonged exposure can cause irritation. **Non Corrosive to Skin:** (as defined and tested in accordance with the U.S. OSHA's Hazardous Communication Standard, DOT Hazardous Material

Regulations, Canada's WHMIS regulations and TDG Regulations. Classified as a mild skin irritant as per the 1992 OECD Guideline for Testing of Chemicals, Number 404 "Acute Dermal Irritation/Corrosion.")

Ingestion: If ingested, this product may be harmful or fatal.

Vapor Inhalation: Avoid mists, product can be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized.

Carcinogenicity Listings: NTP: None. IARC: None.
OSHA: None. ACGIH: None.

Signs and Symptoms of Overexposure: Red, dry skin at point of contact.

Medical Conditions Aggravated by Exposure: Dermatitis may become aggravated by sensitive individuals.

WHMIS Symbols:



Section 4 First Aid Procedures

Eye: Remove contact lenses, immediately flush with water for at least 15 minutes while lifting eyelids. Contact a physician.

Skin: Remove affected clothing. Wash skin immediately and thoroughly with soap and water. If irritation develops and persists, contact a physician.

Ingestion: If swallowed, **DO NOT** induce vomiting, may cause chemical pneumonia if aspirated into lungs. If conscious, give 3-4 glasses of water to dilute and get immediate medical care.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen, contact a physician.

Section 5 Fire & Explosion Hazard

Flash Point and Method: None.

Flammability: Non Flammable.

Explosion Data: Sensitivity to impact: None. Sensitivity to static charge: None.

Combustion Products: As with any organic material, combustion will produce carbon dioxide an/or carbon monoxide.

Extinguishing Media: Water spray, carbon dioxide, dry chemical.

Unusual Fire and Explosion Hazard: At temperatures above 60°C/140°F acid action on most metals may release hydrogen, a highly flammable and explosive gas.

Special Firefighting Precautions: Keep containers cool with water spray. Avoid breathing decomposition products.

Firefighting Equipment: Use self-contained breathing apparatus.

Hazardous Decomposition Products: Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

Section 6 Accidental Release Measures

Leak and spill Procedure: Evacuate area. Ventilate area. Collect for disposal.

Small Spills: Absorb with non-reactive absorbent (sand). Dispose in an appropriate waste container.

Large Spills: Dike with soil, and or other suitable materials. Recover usable product and store in compatible containers for recovery or disposal, rinse area clean.

Personal Precautions: Observe all personal protection equipment recommendations.

Environmental Precautions: Prevent large spills from entering sewers or waterways.

Section 7
Handling & Storage

Safe Handling and Hygienic Practices: Avoid eye contact. Avoid breathing mist or vaporized fumes. Avoid prolonged skin contact. Wash immediately after using.

Storage Requirements: Do not store in metal containers especially aluminum. Storage in certain metal containers at temperatures above 60°C/140°F may result in hydrogen gas evolution. Store in tightly closed, original container or in fiberglass, polyethylene or polypropylene containers. Keep from freezing and below 48°C/120°F.

Section 8
Exposure Controls

Engineering Controls: No special requirements.

Personal Protection

Ventilation: If current ventilation practices are not adequate for minimizing exposures, additional ventilation or exhaust systems may be required.

Respiratory: Avoid breathing vapor and/or mist.

Eye Protection: Use chemical goggles or full face shield.

Clothing: Rubber or Nitrile gloves recommended.

Exposure Limit Guidelines: None established.

Section 9
Physical & Chemical Properties

Appearance and Odor: A clear colorless liquid with little or no odor.

Specific Gravity: 1.10, 9.21 lbs/US gallon.

Vapor Density: (Air=1), >1. (Estimated)

Vapor Pressure: Not determined.

Evaporation Rate: (BuAc=1) <1.

pH of Concentrate: <1

Solubility in Water: 100%.

Percent Volatile by Volume: None.

Section 10
Stability & Reactivity

Stability: Stable up to 110°C/230°F.

Conditions to Avoid: Heating above 110°C/230°F results in an exothermic decomposition with rapid release of CO₂ gas. Avoid contact with oxidizers. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorites (e.g. chlorine bleach, sulfides, or cyanides) will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will generate heat.

Hazardous Decomposition: Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

Hazardous Polymerization: Will not occur.

Section 11
Toxicity Information

Toxicity:

Acute eye irritation/corrosion test: This product was found to be Corrosive to the eyes when tested using the Modified Draize method (OECD Guidelines for Testing Chemicals, Sec. 4-5, 1992.)

Section 12
Ecological Information

Biodegradability: Biodegradable.

Ecotoxicity: 96 hour LC₅₀ > 140 mg/L (rainbow trout), 48 hour LC₅₀ 71.1 mg/L (ceriodaphnia dubia). 15 minute LC₅₀ 16.23% effect at a concentration of 10 mg/L (Vibrio fischeri, 4H6002)

Section 13
Disposal Considerations

RCRA Classification: This product has been evaluated for RCRA characteristics and does not meet the criteria for a hazardous waste, if discarded in its purchased form.

Special Instructions: Neutralize waste fluids with soda ash and discharge according to local, State and Federal Regulations.

Section 14
Transportation Information

U.S. Department Of Transportation: Not regulated.

Proper Shipping Name:

Hazard Class:

Identification Number:

Packaging Group:

Canadian T.D.G.: Regulated Material.

Proper Shipping Name: Corrosive liquid, N.O.S.

Contains: (urea monohydrochloride)

Hazard Class: 8

ID Number: UN 1760

Packaging Group: III

***Note: This material is corrosive to Aluminum only. Non-Corrosive to Skin & Mild Steel.**

Water Transportation(IMDG): Regulated Material.

Proper Shipping Name: Corrosive liquid, N.O.S.

Contains: (urea monohydrochloride)

Hazard Class: 8

ID Number: UN 1760

Packaging Group: III

***Note: This material is corrosive to Aluminum only. Non-Corrosive to Skin & Mild Steel.**

Air Transportation (IATA): Regulated Material.

Proper Shipping Name: Corrosive liquid, N.O.S.

Contains: (urea monohydrochloride)

Hazard Class: 8

ID Number: UN 1760

Packaging Group: III

***Note: This material is corrosive to Aluminum only. Non-Corrosive to Skin & Mild Steel.**

Section 15
Regulatory Information

WHMIS Classification: Class E

CERCLA, State and Local Planning (Reportable Quantities): Not required.

OSHA & WHMIS Compliance: This MSDS prepared in accordance with 29CFR 1910.1200: ANSI Z400.1 standard and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Products Act).

SARA Title III Superfund: The product in its purchased form is not regulated under the SARA "Hazard Categories" under Section 311 and 312 of the Superfund Amendment: Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of the ingredients are listed and the Reauthorization Act of 1986 (SARA Title III).

State Right-to-Know Compliance: Not required.

TSCA: All ingredients are listed on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL): All ingredients are listed.

Volatile Organic Compound (VOC) Content: This product complies with all VOC requirements in all 50 states.

Special Instructions: No special requirements.

Section 16
Other Information

Hazard: (Based on HMIS Standard), Health: 1 Flammability: 0 Reactivity: 0

Hazard Index: Minimal: 0, Slight: 1, Moderate: 2, High: 3, Extreme: 4



HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	

We believe the information contained herein is accurate and current as of the date of this Material Safety Data Sheet. Nevertheless, the user must evaluate and determine whether the conditions for use and application of the product, including proper disposal thereof, are appropriate, safe, and legal.