

MATERIAL SAFETY DATA SHEET**CHEMSPEC** ® • 901 N. NEWKIRK STREET • BALTIMORE, MD 21205 • (410) 675-4800

HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, SPECIAL = NONE, DEGREE OF HAZARD: 4 = EXTREME, 3 = HIGH, 2 = MODERATE, 1 = SLIGHT, 0 = INSIGNIFICANT

PRODUCT NAME: **RUST REMOVER - OXALIC ACID**

DOCUMENT CODE: Rust Remover Oxalic Acid

CHEMICAL FAMILY: Organic Acid

DATE: 02/10/94

DATE REVIEWED: 08/24/99

EMERGENCY 24-HOUR TELEPHONE # 1-800-424-9300 (CHEMTREC)

N/A = Not applicable

N/D = Not determined

SECTION I: HAZARDOUS INGREDIENTS/HEALTH HAZARD DATA

This product has not been tested as a whole for health effects on animals or humans. Hazardous ingredients >0.99% and carcinogenic material >0.1% posed the following health hazards when tested individually at 100%.

SECTION I (a): List of carcinogenic ingredients at >0.1%.

None.

SECTION I (b): List of hazardous ingredients at >1.0%.

NAME	CAS NO.
OXALIC ACID	144-62-7

Corrosive. May cause chemical burns to eyes, nose and throat. Repeated or prolonged skin exposure can cause dermatitis and slow-healing ulcers. Toxic by inhalation and ingestion. Ingestion may cause chemical burns of upper digestive tract, vomiting, abdominal burning and pain. Ingestion may cause death with symptoms of nausea, shock, collapse and convulsions coming on rapidly. Inhalation of dust or vapor may cause irritation of upper respiratory tract, difficulty breathing, gastrointestinal disturbances, headache and CNS effects. Repeated or prolonged inhalation may lead to albuminuria, chronic cough, vomiting, back pain and gradual emaciation and weakness. Repeated inhalation or ingestion exposure may have kidney effects. Oral rat LD50 is 50 to 500 mg/kg. OSHA PEL and ACGIH TLV are 1 mg/l, TWA. IDHL value is 500 mg/m³.

SECTION II: EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with water for at least 20 min. Consult physician.
SKIN: Remove contaminated clothing. Wash exposed skin with soap and water.
INHALED: Remove to fresh air. Rinse out mouth and gargle with water. If symptoms persist or are severe get medical attention.
INGESTION: Do not induce vomiting. Rinse mouth out with water. Drink 2 glasses of water followed by milk or milk of magnesia. Seek immediate medical attention.
PHYSICIAN: Treatment based on judgment of attending physician.

SECTION III: PHYSICAL / CHEMICAL DATA

APPEARANCE AND ODOR: Clear colorless liquid with low odor.	WATER SOLUBILITY, % BY WT: > 90
SPECIFIC GRAVITY: 1.03	% VOLATILE BY WT.: 91 - 93
WT/GAL: 8.6 lbs.	pH< less than 1.0
	BOILING POINT: N/D

SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT: > 200 degrees F (TCC) AUTO-IGNITION TEMPERATURE: N/D
EXPLOSIVE LIMITS - LEL: N/D UEL: N/D
EXTINGUISHING MEDIA: Foam, CO₂, water fog, or dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH/MSHA approved self-contained positive-pressure breathing apparatus and protective clothing where this material is involved in a fire. UNUSUAL FIRE AND EXPLOSION HAZARD: None known.

SECTION V: REACTIVITY DATA

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur.
INCOMPATIBILITY: Chlorine bleach, furfuryl alcohol, and other strong oxidizers.
HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS: Possibly formic acid, CO and CO₂.

SECTION VI: SPILLS, LEAKS AND DISPOSAL PROCEDURES

WASTE DISPOSAL: In accordance with Federal, State and Local regulations.
NEUTRALIZING CHEMICALS: Dilute solutions of alkali caustics.

SECTION VII: PROTECTION MEASURES

VENTILATION: Local exhaust or dilution ventilation may be necessary in poorly ventilated areas.
EYE PROTECTION: Chemical resistant safety glasses or goggles.
RESPIRATORY PROTECTION: When adequate ventilation cannot be achieved, use NIOSH/MSHA approved respirator equipped with acid gas cartridges.
GLOVES: Rubber or plastic gloves. OTHER PROTECTIVE EQUIPMENT: Body-covering clothing should be worn.

SECTION VIII: SPECIAL PRECAUTIONS

One should always use chemicals with awareness of potential hazards, known and unknown, and their effect on the human system. We urge users to minimize employee exposure to all chemicals, including this product and to keep the level of exposure commensurate with good industrial hygiene practices.

DISCLAIMER OF LIABILITY

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material and the results to be obtained from the use thereof.