

METRISHINE**Descaler / Rust Remover****1 - IDENTIFICATION**

Manufacturer: Metrex Research Corporation
Address: 1717 West Collins Avenue
City, State, Zip: Orange, CA 92867
Telephone: 1-800-KERR-123
Emergency: Chemtrec 1-800-424-9300
Date Prepared: May 2, 2005

2 - COMPOSITION INFORMATION**Hazardous Ingredients**

	<u>CAS #</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Phosphoric Acid (85 % Conc.)	7664-38-2	1mg/m ³	1 mg/m ³	35-45
Glycolic Acid (70%)	79-14-1	NE*	NE*	10

* NE = Not Established

Other Ingredients

Water, surfactant, corrosion inhibitor

3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: ~212°F
Specific Gravity (H₂O = 1): ~1.25
Vapor Pressure (mm Hg): N/A
Vapor Density (AIR = 1): N/A
Solubility in Water: Soluble
Reactivity in Water: N/A
Appearance and Odor: Clear to light straw colored liquid with a burnt sugar odor.
pH: Concentrate: <1.0 Diluted for use: 1.7 - 2.0

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A
Flammable Limits: LEL: N/A UEL: N/A
Extinguishing Media: Not considered to be a fire hazard
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

5 - REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Excessive heat.
Incompatibility (Material to Avoid): Strong caustics, metals, sulfides and sulfites.
Hazardous Decomposition Products: Toxic fumes of phosphorous oxides, oxides of carbon.
Hazardous Polymerization: Will not occur

6 - HEALTH HAZARD DATA

Routes of Entry:
Skin: Corrosive. Causes severe irritation, redness, pain and skin burns to every area of contact.
Eyes: Corrosive. Causes severe irritation, pain and eye damage.
Inhalation: Inhalation is irritating to the mucous membrane and respiratory tract. In extreme cases, severe irritation and burns may result.
Ingestion: Corrosive. Causes burns of the mouth, throat, and digestive tract.
Carcinogenicity - NTP: No
IARC Monographs: No OSHA Regulated Carcinogen: No

7 - EMERGENCY FIRST AID PROCEDURES

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention.
Eyes: Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, contact a physician.
Ingestion: Do not induce vomiting. Give large quantities of water and get medical attention.

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Isolate hazard area. Ventilate area of leak or spill. Contain and recover liquid when possible. Neutralize with alkaline material (soda ash, lime), then absorb with inert material and transfer to suitable container for disposal. Do not use combustible materials, such as saw dust. Do not flush to sewer!
Waste Disposal Method: Incinerate in proper equipment. Dispose of in accordance with all Federal, State and local regulations.
Precautions to be taken in handling and storing: Store at normal room temperature (65°F-75°F).
Other precautions: Use according to directions. Contact with skin, soft tissue, and eyes should be avoided and can cause surface damage to soft tissue.

9 - CONTROL MEASURES

Respiratory Protection (Specify Type): N/A
VENTILATION:
Local Exhaust: Is preferred which prevents dispersion into the general work area.
Mechanical (General): May be sufficient to control exposure to vapors.
Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat or apron as appropriate to prevent skin contact.
Eye Protection: Chemical safety goggles and/or full face shield where splashing of solutions is possible.
Other Protective Clothing or Equipment: Eye wash and safety shower recommended in use area.
Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

10 - TRANSPORTATION INFORMATION

Regulated:	DOT, IATA, IMO
Proper Shipping Name:	Phosphoric Acid (Solution)
Hazard Class:	8
Identification Number:	UN1805
Packing Group:	III
Label:	Corrosive

11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:
H3 F0 R0
(Hazard Index: 4 - Severe Hazard; 3 - Serious Hazard; 2 - Moderate Hazard; 1 - Slight Hazard; 0 - Minimum Hazard)

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information in this MSDS is, to the best of our knowledge, believed to be accurate.