SUPPLIER MATERIAL SAFETY DATA SHEET (MSDS) N/D=Not Determined N/A=Not Applicable

Flammability: 0 Manufacturer: ESTEAM **Product: RUST REMOVER Reactivity:** 0 Trade Name: Rust Remover Chem. Name: N/A Health:

Use: Removal of rust, metallic and other stains

NFPA LEAST=0, SLIGHT=1, MODERATE=2, HIGH=3, EXTREME=4 Chem. Family: Mixture

HAZARDOUS INGREDIENTS CAS# %WT **EXPOSURE LIMITS (TLV) HAZARD DATA** Phosphoric Acid 7664-38-2 1-5 LD50 1530 mg/kg (oral-rat) $1 \, \text{mg/m}3$

Oxalic Acid 144-6-27 1-5 LD50 475 mg/kg (oral-rat) 2 mg/m3 2-Butoxyethanol 111-76-2 1-5 LD50 1746 mg/kg (oral-rat) 25 ppm TWA

PHYSICAL DATA

Stable: Physical Liquid **Solubility** Boiling **Evaporation** Percent **State:** Point (C): 100 in Water: 100% N/D Volatile (vol): N/D Odor/ Clear, sharp odor

Freezing **Specific** Vapor **Appearance:** Point (Č): 0 (undiluted): 0.6 N/D N/D **Gravity: Pressure:**

FIRE & EXPLOSION HAZARD Conditions: N/A

Hazardous Combustion Products: Phosphorous oxide Flammability: N

Means of Extinction: Upper Explosion Limit (% by vol):

Special Procedures: Spray water to cool & control vapors **Lower Explosion Limit (% by vol): Auto-ignition: Explosion Sensitivity to Impact: N/A**

TDG/WHMIS: Non hazardous / E, D2B Rate of Burning: Chemical Sensitivity to Static Discharge: N/A N/A

Explosive Power: N/A Flashpoint (C) & Method: N/A

Chemical Stability: Stable REACTIVITY DATA

Hazardous Decomposition Product: None Incompatible Substances: Bases, sulphides, phosphides, cyanides,

acetylides, fluorides, silicocide and carbides.

Freeze/Thaw

TOXICOLOGICAL PROPERTIES

Route of Entry - Skin Contact: Route of Entry - Skin Absorption: N **Route of Entry - Eye Contact:** Υ

Route of Entry - Inhalation: Υ

Route of Entry - Ingestion:

Reproductive Effects Y/N:N/D

Carcinogenicity Y/N: Ν Mutagenicity Y/N: Ν Teratogenicity Y/N: Ν

N/D

Effects of Overexposure: Acute Effects:

May cause severe skin irritation. If splashed in eyes, may cause severe burns or permanent eye damage. Inhalation of mist may cause nose and throat irritation. Ingestion may cause burns to the mouth & throat, pain in the stomach, nausea, vomiting, diarrhea & convulsions. In severe cases collapse

and death.

Chronic Effects: Skin contact may cause dermatitis.

PREVENTATIVE MEASURES

Gloves: Rubber Footwear: Rubber Boots **Clothing:** Resistant coveralls **Respirator: Eyes:** Goggles Other: N/A

Recommended Engineered Controls: Use with adequate ventilation.

Leak & Spill Procedures:

Recover liquid into a sealed plastic container for disposal. Neutralize area with soda ash or lime and flush with

Waste Disposal Methods:

According to federal, provincial and municipal regulations.

Special Handling Procedures: Store in a plastic or acid resistant container in a clean dry area.

FIRST AID MEASURES

Inhalation: Move person to fresh air. If necessary give artificial respiration or oxygen. Call a doctor if in distress.

Ingestion: Do not induce vomiting. Rinse mouth several times with cold water. Drink large amounts of water. Seek medical attention.

Eye Contact: Immediately flush eyes with running water for at least 15 minutes. Contact a physician if irritation persists.

Skin Contact: Immediately flush skin for at least 15 minutes. Launder clothing before reuse. Contact a physician if irritation persists.

Prep./Revised Date: Mailing Address: Esteam Manufacturing Ltd. January 15, 2017

3750-19th Street NE Calgary, AB T2E 6V2 **Prepared By:** R. Russell

Emergency Response: 1-613-996-6666 (Transport Emergencies)

Manufacturer's MSDS

Source Material:

This information is complete to the best of our knowledge, however, users are encouraged to make their own investigations into the suitability of the information to their particular purposes. READ THE LABEL before using this or any product, and take any necessary precautions, dictated by the label or by common sense to ensure that your health is protected.