SUPPLIER MATERIAL SAFETY DATA SHEET (MSDS)

N/D=Not Determined N/A=Not Applicable

NFPA LEAST=0, SLIGHT=1, MODERATE=2, HIGH=3, EXTREME=4

Manufacturer: ESTEAM Flammability: 2 **Product:** CITRUS CLEANER CONCENTRATE Reactivity: Trade Name: Citrus Cleaner Concentrate Chem. Name: N/A

Health: **Protection:** Use: All purpose cleaner/degreaser

Incompatable Substances: Strong oxidizing agents

Effects of Overexposure:

HAZARDOUS INGREDIENTS CAS# % WT HAZARD DATA **EXPOSURE LIMITS (TLV)**

D-limonene 5989-27-5 15-30 LD50 4400 mg/kg (oral-rat) 2-Butoxyethanol 111-76-2 5-20 25 ppm / TWA LD50 1746 mg/kg (oral-rat) Diethylene glycol monobutyl either 112-34-5 2-6 10 ppm/TWA LD50 4500 mg/kg (oral-rat) Monoethanolamine 141-43-5 1-5 N/A LD50 1720 mg/kg (oral-rat)

PHYSICAL DATA Freeze/Thaw

Stable: **Physical** Liquid Solubility Boiling Evaporation Percent

State: *Point (C)*: 176 in Water: Complete Rate: N/D Volatile (vol): N/D Odor/ Citrus/ Orange Freezing Specific Vapor Appearance: Point (Č): N/D (undiluted): 11.5 N/D N/D **Gravity:** Pressure:

FIRE & EXPLOSION HAZARD Conditions: N/D

Hazardous Combustion Products: Smoke, oxides of carbon (CO, CO2) Flammability: Yes

Upper Explosion Limit (% by vol): Means of Extinction: CO2, dry chemical, foam Lower Explosion Limit (% by vol): Special Procedures: Water to cool containers N/D

Auto-ignition: Explosion Sensitivity to Impact: N/D Rate of Burning: TDG/WHMIS: Non hazardous / B2, D2B N/D Chemical Sensitivity to Static Discharge: N/D

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

Chemical Stability: Stable REACTIVITY DATA

TOXICOLOGICAL PROPERTIES

Hazardous Decomposition Product: CO, CO2

Chem. Family: Mixture

Acute Effects: Reproductive Effects Y/N: N/D Route of Entry - Skin Contact:

Irritation upon direct contact. Vapors may irritate. Carcinogenicity Y/N: Route of Entry - Skin Absorption: N/D N

Route of Entry - Eye Contact: Mutagenicity Y/N: Υ N/D **Chronic Effects:** Route of Entry - Inhalation: Teratogenicity Y/N: Υ N/D Prolonged or repeated contact with skin may cause defatting

Route of Entry - Ingestion: TLV: N/D resulting in dermatitis.

PREVENTATIVE Gloves: Rubber Footwear: N/A Clothing: N/A **MEASURES** Eyes: Respirator: N/A Chemical glasses Other: N/A

Recommended Engineered Controls: Leak & Spill Procedures: Waste Disposal Methods: Special Handling Procedures:

Use with adequate ventilation. Mop up excess. Flush with water to a According to federal, provincial and Keep container closed when not in municipal regulations. sanitary sewer. use. Keep away from children.

FIRST AID MEASURES

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

Ingestion: Immediately rinse mouth and throat thoroughly with water. Call a physician. **Eye Contact:** Immediately flush eyes with running water for at least 15 minutes. Call a physician.

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

Prep./Revised Date: Mailing Address: Esteam Manufacturing Ltd. June 1, 2016

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

Source Material:

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

Manufacturer's MSDS



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.