Material Safety Data Sheet Thermal Supply Degreaser

Thermal Supply 717 S. Lander St. Seattle, WA 98134-2008 206-624-4590 DATE PREPARED: 01/09/2012 REVISION DATE: 03/06/09 CHEM-TEL: 800-225-3924 PRODUCT NUMBER: 8070

SECTION I - IDENTIFICATION

PRODUCT NAME: Thermal Supply Degreaser **PRODUCT CODE:** 8070 **PRODUCT USE:** Degreaser

SECTION II - COMPOSITION/HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTCAS NUMBEROSHA PELACGIH TLVTetrachloroethylene127-18-425 ppm100 ppmCarbon Dioxide124-38-95000 ppm5000 ppm

SECTION III - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Do not expose to high temperatures or store in direct sunlight. Harmful or fatal if swallowed or inhaled. Suspect cancer hazard. Risk of cancer depends on level and duration of exposure.

ROUTES OF ENTRY: Inhalation, skin absorption, ingestion, skin and/or eye contact

EYES: Strong Irritation likely, redness, visual disturbance, and pain. May cause eye damage.

INGESTION: Nausea, vomiting, headaches, abdominal pain, diarrhea, dizziness, tremor, drowsiness, pulmonary edemas, absorption through the gastrointestinal tract may produce symptoms of CNS depression ranging from unconsciousness to death.

INHALATION: Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.

SKIN (**DERMAL**): Irritation likely, redness and pain. May cause localized de-fatting, blistering with prolonged skin contact. May be absorbed through the skin.

MEDICAL CONDITION AGGRAVATED: Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system.

CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to skin, kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

CARCINOGENICITY:

OSHA: Yes ACGIH: A3 Known Animal NTP: Anticipated-2 IARC: A2 – Probable for human OTHER: CA Prop65

SECTION IV - FIRST AID MEASURES

EYES: Immediately flush with water for 15 minutes while holding eyelids open, make sure contact lenses are removed. Seek immediate medical attention. INGESTION: Seek medical attention immediately, rinse mouth out with water, drink 2 glasses of water, and induce vomiting immediately as directed by medical personnel. INHALATION: Move to fresh air. If not breathing administer artificial respiration, if breathing is difficult give oxygen. If irritation develops seek medical attention. SKIN: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Seek immediate medical attention. NOTE TO PHYSICIAN: Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

SECTION V – FIRE-FIGHTING MEASURES

FLASH POINT: N/A

FLAMMABLE LIMITS IN AIR, (% BY VOLUME) UPPER: N/A LOWER: N/A

EXTINGUISHING MEDIA: Dry chemical, foam, or CO2.

SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing and NIOSH approved SCBA with full face piece operated in positive pressure or pressure demand. Use water mist to keep containers cool in fire situations.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure exposure to high temperatures above 120F can cause bursting. HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, hydrogen chloride gas, and Phosgene under forced combustion.

SECTION VI – ACCIDENTAL RELEASE MEASURES

SPILL: Remove sources of ignition such as pilot lights. Material is heavier than air and can settle in low lying areas in flammable concentrations, ventilate area to keep concentration level below TLV. Product will undergo rapid evaporation. Use absorbent on spill sweep to clean and put the spilled material in an appropriate waste disposal. Small releases may be wiped up with wiping material. Dispose in accordance with local, state and federal laws. Large Spill: Use Splash goggles, full suit, vapor respirator/SCBA, boots, gloves.

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SECTION VII - HANDLING AND STORAGE

HANDLING AND STORAGE: Do not use or store near heat or open flame. Store in cool dry, well-ventilated area. Keep container tightly closed. Follow all label instructions. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

OTHER PRECAUTIONS: Exposure to temperatures above 120 F may cause bursting. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with skin.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION: Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Local exhaust ventilation is preferred to keep the airborne concentrations of vapors below their respective threshold limit value.

RESPIRATORY PROTECTION: Use only in well ventilated areas. If exposure levels are exceeded then organic vapor cartridge respirator or SCBA will be needed.

PROTECTIVE CLOTHING: Safety glasses are always recommended when using chemicals. Impervious gloves such as neoprene or solvex and Long sleeve clothing to cover skin if desired.

ADDITIONAL MEASURES: Wash hands after use.

EXPOSURE LIMITS: TWA: 25 (ppm) from OSHA (PEL) [United States] TWA: 25 STEL: 100 (ppm) from ACGIH (TLV) [United States] TWA: 170 (mg/m3) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear colorless ODOR: Chlorinated

PHYSICAL STATE: Liquid BOILING POINT: 250.3 °F (121.3 °C)

MELTING POINT: -8.1°F (-22.3 °C) **pH:** N/A

VAPOR PRESSURE (mm Hg): 12.75 mmHg

VAPOR DENSITY (AIR=1): 5.7

EVAPORATION RATE: EVAPRT

SPECIFIC GRAVITY (H2O=1): 1.623

SOLUBILITY IN WATER: 0.015 g/100 ml @ 25 °C (It slowly decomposes in water to Trichloroacetic and Hydrochloric acids.)
VOLATILITY INCLUDING WATER (%): 100%

VOLATILE ORGANIC COMPOUNDS (VOC): 0%

SECTION X – STABILITY AND REACTIVITY DATA

CHEMICAL STABILITY: Stable CONDITIONS TO AVOID: Temperatures above 120F, heat, flame, and sources of ignition.

INCOMPATIBILITY: Strong oxidizers, caustics & alkalis, metals; chemically-active metals such as barium, lithium, sodium, potassium, magnesium, titanium & beryllium, concentrated nitric acid, some plastics, rubbers, and coatings.

HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of carbon, Hydrogen Chloride, and Phosgene.

HAZARDOUS POLYMERIZATION: None

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Tetrachloroethylene: ORAL (LD50): Acute: 2629 mg/kg [Rat]. DERMAL (LD): Acute: > 3228 mg/kg [Rabbit]. MIST (LC50):Acute: 34200 mg/m 8 hours [Rat]. VAPOR (LC50): Acute: 5200 ppm 4 hours [Mouse]. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: The substance may be toxic to kidneys, liver, peripheral nervous system, respiratory tract, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. May cause cancer.

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Ecotoxicity in water (LC50): 18.4 mg/l 96 hours [Fish (Fatthead Minnow)]. 18 mg/l 48 hours [Daphnia (daphnia)]. 5 mg/l 96 hours [Fish (Rainbow Trout)]. 13 mg/l 96 hours [Fish (Bluegill sunfish)]. The product itself and its products of biodegradation are not toxic.

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, State and Federal regulations. Do not dump in sewers. Use sand or other non-combustible absorbent material to clean up spill and place in container for later disposal. Do not puncture, incinerate, or reuse container.

RCRA STATUS: Waste solvent likely considered F001, hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

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SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: ORM-D HAZARD CLASS: 2.2 ID NUMBER: UN1950 PACKAGING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME:Aerosols LTD QTY Class 2 **HAZARD CLASS:** 2.2, 6.1

ID NUMBER: 1950 **PACKING GROUP:** N/A

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Aerosols LTD QTY Class 2 **HAZARD CLASS:** 2.2, 6.1

ID NUMBER: 1950 **PACKING GROUP:** N/A

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All ingredients of this product are listed. CERCLA: Tetrachloroethylene: 100 lbs. (45.36 kg)

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): None

SARA 311/312 HAZARD CATEGORIES: Chronic Health Hazard SARA 313 REPORTABLE INGREDIENTS: Tetrachloroethylene

STATE REGULATIONS: California prop. 65: This product contains the following ingredients for which the State of California has found to cause

cancer, birth defects or other reproductive harm, which would require a warning under the statute: Tetrachloroethylene

Tetrachloroethylene - Right to know act - Rhode Island, Pennsylvania, Massachusetts, New Jersey, Minnesota, Michigan, New York, Illinois,

Connecticut

Tetrachloroethylene - spill list - Massachusetts, New Jersey, Louisiana

INTERNATIONAL REGULATIONS: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. Canada: WHMIS: CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC). DSCL: R40- Possible risks of irreversible effects. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S23- Do not breathe gas/fumes/vapour/spray S26-In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

NFPA Health: 2 NFPA Flammability: 0 NFPA Reactivity: 0 NFPA Other: HMIS Health: 2 HMIS Flammability: 0 HMIS Reactivity: 0 HMIS Protection: A

SECTION XVI - ADDTIONAL INFORMATION

PREPARATION BY: Juanita Mercure

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