

MATERIAL SAFETY DATA SHEET

Issue Date: 10/23/06
 Supersedes: 07/14/05

SECTION I - CHEMICAL PRODUCT		
Identity: 130190		
Brands: DCT FREEZER CLEANER		
Hazard Rating: 2	Health: 1	4=EXTREME
	Flammability: 2	3=HIGH
	Reactivity: 0	2= MODERATE
		1=SLIGHT
Emergency Telephone Number: (800) 424-9300 (24-HR – CHEMTREC)		

SECTION II - COMPOSITION AND INGREDIENTS					
Ingredients/Chemical Name: Propylene glycol, isopropanol and other proprietary ingredients					
Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.					
Chemical Name	Common Name	CAS No.	Recommended Limits	Composition Range	LD50/LC50
Propylene glycol	Same	57-55-6	AIHA WEEL: 50 ppm	20 – 80	
Isopropanol	2-propanol; isopropyl alcohol	67-63-0	ACGIH TWA: 400 ppm; 500 ppm STEL OSHA PEL: 500 ppm	1 – 5	
TS 1015 – Trade Secret			ACGIH TWA: 3 ppm; 6 ppm STEL OSHA PEL: 3 ppm	1 - 5	

SECTION III - HAZARDS IDENTIFICATION	
Health Hazards (Acute and Chronic):	
Ingestion:	May be harmful if swallowed.
Eye Contact:	May cause temporary eye irritation upon direct contact.
Inhalation	May cause temporary irritation upon prolonged, repeated exposures.
Skin:	May cause skin irritation upon prolonged, repeated exposures.

SECTION IV - FIRST AID INFORMATION**Emergency and First Aid Procedures:**

- Ingestion:** Drink large quantities of water or milk. Do not induce vomiting. Seek prompt medical attention.
- Eye Contact:** Hold eyelids open and flush thoroughly with plenty of water for at least 15 minutes. Seek prompt medical attention.
- Skin:** Wash skin thoroughly with soap and water. If irritation persists, seek prompt medical attention. If spilled on clothing, change clothes.
- Inhalation:** For accidental, high level inhalation, remove to fresh air. Get medical attention if irritation persists.

Other: None

SECTION V - FIRE FIGHTING INFORMATION

Flash Point (Method Used): 112 F (PMCC) **Explosive Limits:** *LEL:* N/K *UEL:* N/K

Extinguishing Media: Use CO₂, water, or dry chemical.

Special Fire Fighting Procedures: Firefighters should wear structural firefighting gear and SCBA if exposed to vapors or products of combustion

Unusual Fire Hazards: OSHA/DOT Combustible Liquid. Keep sides of containers cool with water spray until well after fire is out.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. Wear personal protective equipment if prolonged exposure and/or splashing is likely.

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

Steps To Be Taken in Case Large Quantities of Material are Released or Spilled: Contain spill. Prevent spills from reaching waterways or sewers untreated. Read "Waste Disposal Method" below for further information.

SECTION VII - HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: Avoid contact eye and skin contact. Store in dry, cool, well-ventilated area away from incompatibles. Keep container sealed when not in use. Wash thoroughly after handling material. Avoid aerosol formation.

Other Precautions: For Institutional Use Only. Keep out of reach of children.

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection (Specify Type): None required with normal use. Avoid creating aerosols in poorly ventilated areas.

Ventilation General

Eye Protection: If splashing or heavy misting is likely, goggles or faceshield may be needed.

Protective Gloves: None required with normal use. Protective gloves (neoprene preferred) may be needed if prolonged, direct contact is anticipated.

Other Protective Equipment: Suitable eyewash facilities

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES	
Boiling Point °F: NAV	Specific Gravity (H₂O=1): 1.05
Vapor Pressure (mm Hg): N/K	Percent Volatile by Volume (%): N/K
Vapor Density (Air=1): N/K	Evaporation Rate (nBuOAc=1): N/K
Appearance and Odor: Clear, colorless slightly viscous liquid with alcohol smell	pH (F.S.): 10.0 – 10.4
Coefficient of Water/Oil Distribution: N/K	Solubility in Water: Complete

SECTION X – STABILITY AND REACTIVITY
Possible Hazardous Reactions/Conditions: None Known
Conditions to Avoid: None Known
Materials to Avoid: Strong oxidizers
Hazardous Decomposition Products: acrid smoke/irritating fumes
Other Recommendations: None
Stability: Stable
Hazardous Polymerization: Will Not Occur

SECTION XI - TOXICOLOGICAL INFORMATION
Propylene Glycol: LD50: (Oral – Rat): 20 g/kg; (Skin – Hmn): 500 mg/mg/7D MLD; (Skin – Hmn): 104 mg/kg/3D-IMOD; (Eye – Rabbit): 500 mg/24 H MLD; Repeated, excessive ingestion may cause CNS effects. TS 1060: LD50 (Oral – Rat): 5045 mg/kg; LD50 (Skin – Rabbit): 12800 mg/kg

SECTION XII - ECOLOGICAL INFORMATION
Propylene Glycol: MOVEMENT & PARTITIONING: Bioconcentration potential is low (BCF<100 or Log Pow<3). Log Octanol/water partition coefficient (log Pow) is –0.92. Henry’s Law Constant (H) is 1.2E-9atm.m ³ /mole. DEGRADTION 7 PERSISTANCE: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD.40%). Biodegradation is expected to be achievable in a secondary wastewater treatment plant. 5-Day biochemical oxygen demand (BOD5) is 1.16 p/p. 20-Day biochemical oxygen demand (BOD20) is 1.45 p/p. Theoretical Oxygen Demand (ThOD) is calculated to be 1.68 p/p. Inhibitory concentration (IC50) in OECD Activated Sludge Respiration Inhibition Test (OECD Test No. 209) is >1gm/L. Degradation is expected in the atmospheric environment within minutes to hours. ECOTOXICITY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50>100mg/L in most sensitive species). Acute LC50 for fathead minnow (Pimephales promelas) is 4600-54900 mg/L. Acute LC50 for guppy (Poecilia reticulata) > 10000 mg/L. Acute LC50 for water flea (Daphnia magna) is 4850 – 34400 mg/L. Acute LC50 for rainbow trout (Oncorhynchus mykiss) is 44 mL/L (about 44000 mg/L).

