



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<u>Company Name</u> Nu-Calgon Wholesaler, Inc.	<u>Phone Number</u> (314) 469-7000 / (800) 554-5499		<u>CHEMTREC</u> (800) 424-9300	
<u>Street Address</u> 2008 Altom Court	<u>City</u> St. Louis	<u>State</u> MO	<u>Postal Code</u> 63146-4151	<u>Last Update</u> 8/19/11
<u>Product Name</u> Freez-Kontr'l FG	<u>Product Number</u> 4188-04	<u>Product Use</u> Closed system anti-freezing agent.		<u>EPA Registration #</u> N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
Propylene Glycol, USP Grade	80 - 100	57-55-6	NE	NE
Dipotassium Phosphate-Food Grade	<5	7758-11-4		

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Material is a clear, colorless solution.

Potential Health Effects

Eyes: May cause transitory stinging and tearing.

Skin: Mild irritant and defatting agent, especially on prolonged contact.

Ingestion: Relatively non-toxic. Ingestion of sizable amount (over 100 mL) may cause some gastrointestinal upset and temporary central nervous system depression. Effects appear more severe in individuals with kidney problems.

Inhalation: No adverse effects via Inhalation.

Chronic Exposure: Lactic acidosis, stupor, and seizures have been reported following chronic ingestion.

Carcinogenicity: This product has NOT been identified as a carcinogen by NTP, IARC, ACGIH, OSHA, or CA Prop 65.

Medical Conditions Aggravated by Exposure: Kidney disorders.

SECTION 4 – FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin: Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Ingestion: Not expected to require first aid measures. Give several glasses of water to drink and dilute. If large amounts are swallowed, seek medical advice. Note to physician: In case of ingestion, monitor for acidosis and central nervous system changes. Exposed persons with previous kidney dysfunction may require special treatment.

Inhalation: Remove to fresh air. Not expected to require first aid measures.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: 99°C/211°F

Autoignition Temp: 371°C/700°F

Hazardous Products of Combustion: No Data.

Flammable Limits in Air: (% vol. in air) -17.4

Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire. Water Spray: OK Carbon Dioxide: OK Foam: OK Dry Chemical: OK Other: Any "ABC" Class

Fire and Explosion Hazards: Containers may explode in the heat of the fire. Explosion Sensitivity to Mechanical Impact: Not sensitive. Explosion Sensitivity to Static Discharge: Not sensitive.

Special Firefighting Procedures: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by the DOT Emergency Response Guidebook, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area and keep unauthorized personnel out. Contain spill if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Cool equipment exposed to fire with water, if it can be done with minimal risk.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: For small releases of this product, wear latex or nitrile gloves and safety glasses. Absorb spilled liquid and rinse area thoroughly with soap and water. For large or uncontrolled releases, ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal equipment and specified in section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Work and Hygiene Practices: As with all chemicals, avoid getting this product ON YOU or IN YOU. Do not eat, drink, smoke or apply cosmetics while handling the product. Wash hands thoroughly after handling. Protective Practices During Maintenance of Contaminated Equipment: When cleaning non-disposable equipment, wear latex or nitrile gloves (double gloving is recommended), goggles, and lab coat. Wash equipment with soap and water. All needles, syringes, vials and other disposable items contaminated with this product should be disposed of properly.

Storage Requirements: Store only in approved containers. Keep away from any incompatible materials or conditions (see Section 10). Store in a dry ventilated area at a temperature of 15°C to 30°C (59°F to 86°F). Protect from light.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Not normally required for routine, administration of this product. A NIOSH certified air-purifying respirator may be used under conditions where airborne concentrations are expected to be excessive. Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye Protection: The use of chemical goggles to safeguard against potential eye contact, irritation, or injury is recommended.

Protective Clothing: Use protective gloves. Wash hands before and after using gloves. Use clean body covering.

Exposure Guidelines: No Data.

Specific Engineering Controls (such as ventilation, enclosed process): Use with adequate ventilation. Follow standard medical product handling procedures.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid	Freezing Point: -60°C/-76°F	% Volatile by Weight: No Data.%
Color: Orange	Vapor Density [air =1]: 60-90° F: 2.6	Evaporation Rate: (ether=1): N/A
Odor: near odorless	Vapor Pressure: mm Hg: 0.1	Specific Gravity: 1.04
Boiling Point: 182°C/360°F	Solubility in Water: Complete	pH (concentrate):

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable under labeled storage conditions.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizing agents.

Reactive Conditions to avoid: Heat, ignition sources, and incompatibles

Decomposition Products: CO₂, CO, aldehydes

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Propylene Glycol	No Data.	No Data.	Oral LD50 (rat) = 20 g/kg Skin LD50 (rabbit) = 20.8 g/kg	Irritation eye (rabbit) = 500 mg/24H mild
			Mutagenicity: DNA inhibition: Subcutaneous mouse = 8000mg/kg.	When propylene glycol was given at 30% in the diet, it affected reproduction rates in rats.
			Cytogenic Analysis: Subcutaneous mouse = 8000 mg/kg. Cytogenic analysis: Hamster, Fibroblast = 32 gm/L.	It has generally not affected fertility or reproduction, except at very high dosed where effects could be attributed to nutritional deficiency.

SECTION 12 – ECOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>Aquatic Toxicity Data</u>
	When released into the soil, this material is expected to readily biodegrade. When released into the soil, the material is expected to leach into ground water. When released into water this material is expected to readily
	degrade. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of unused contents according to federal, state, and local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: No Hazardous

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT (Land)	Not Regulated.			
IMO (Water)	No Data.			
ICAO (Air)	No Data.			

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	No Data.
SARA Title III: (Superfund Amendments & Reauthorization Act)	The components of this product are not subject to the reporting requirements of Sections 302, 304 and 313 of Title II of the Superfund Amendments and Reauthorization Act.
OSHA: (Occupational Safety & Health Administration)	No Data.
TSCA: (Toxic Substance Control Act)	Propylene glycol is a “drug” as defined by the Federal Food, Drug and Cosmetic Act and is therefore not a chemical substance under TSCA.
VOC: (volatile Organic Compounds)	slightly volatile
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	No Data.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
CERCLA: (Comprehensive Response Compensation & Liability Act)	Not applicable
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health: 0 Flammability: 1 Reactivity: 1

SECTION 16 – OTHER INFORMATION

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does NOT contain a chemical known to the State of California to cause developmental and reproductive effects.
Other U.S. Federal Regulations: Based on this product’s use, the requirements of the OSHA Bloodborne pathogen Standard (29 CFR 1910.1030) are not applicable.
ANSI Labeling (Based on 129.1. Provided to Summarize Occupational Exposure Hazards):

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.