

# Comet Chemical Company Ltd.

3463 Thomas Street Innisfil ,ON L9S 3W4

Tel: (705) 436-5580 Fax: (705) 436-7194



## Materials Safety Data - PROPYLENE GLYCOL

Shipping Name

Transport of Dangerous Goods Class

WHMIS Class

Material Use

UN - not regulated for transport

not regulated for transport

not regulated for transport

not controlled under WHMIS

non-toxic antifreeze, food additive, inks

1. HAZARDOUS INGREDIENTS	CAS NUMBER	%	TWAEV (ppm)	LD <sub>50</sub> ORAL	(mg/kg) SKIN	LC <sub>50</sub> ppm INHALATION
Propylene Glycol (1,2-Propanediol)	57-55-6	100%	not listed	18,300	21,000	no data

### 2. PHYSICAL CHARACTERISTICS

Odour & Appearance	clear, colourless, odourless, viscous, hygroscopic liquid
Odour Threshold	none - odourless
Vapour Pressure	0.07 mmHg / 0.009 kPa (20°C)
Vapour Density (air = 1)	2.6
Boiling Point	188°C
Freezing Point	-60°C
Specific Gravity	1.038
Water Solubility	complete; also soluble in alcohols, ketones & ethers

### 3. FLAMMABILITY & REACTIVITY

Flash Point	99°C (closed cup)
Autoignition Temperature	371°C (can burn if strongly heated)
Flammable Limits	2.6% - 12.5%
Hazardous Combustion Products	carbon monoxide, nitrogen oxides
Firefighting Precautions	alcohol-type foam, dry chemical, water fog, water spray to cool below flash point, water jet may spread flames; firefighters must wear SCBA
Sensitivity to Static Discharge	not sensitive
Sensitivity to Mechanical Impact	not sensitive
Chemical Stability	stable; will not polymerize
Reactive With	strong oxidising agents
Dangerous Decomposition Products	none apart from "Hazardous Combustion Products"

### 4. TOXICOLOGY

#### EFFECTS OF ACUTE EXPOSURE

Skin Contact	virtually without effect ( <i>irritation has been reported in 16% of 866 dermatitis patients</i> )
Skin Absorption	slight; no toxic effect anticipated by this route
Eye Contact	mildly irritating
Inhalation	vapour or mist are apparently without effect (10% vapour apparently harmless to humans)
Ingestion	little or no effect; at lethal dose, convulsions and pulmonary oedema may occur

## (Propylene Glycol, cont'd)

### EFFECTS OF CHRONIC EXPOSURE

General	concentrated water solutions, held against the skin, are reported to irritate
Sensitising	no
Carcinogenic	no
Reproductive Effect	none known in humans
Synergistic With	not known
Estimated LD <sub>50</sub>	18,300 mg/kg (oral, guinea pig); 21,000 mg/kg (skin, rabbit)
Estimated LC <sub>50</sub>	no data

### 5. PROTECTIVE EQUIPMENT

Hands	not required
Eyes	safety glasses with side shields
Respirator	not required
Clothing	not required

### 6. ENVIRONMENT

Leak Precaution	dyke to control spillage and prevent environmental contamination
Handling Spill	recover free liquid with suitable pumps; absorb residue on a suitable sorbent and store for disposal
Waste Disposal	<b>do not flush to sewer</b> ; the concentrated liquid can kill marine flora and fauna; may be incinerated in approved facility with flue gas scrubbing

### 7. STORAGE & HANDLING

Store and use in a cool dry environment, away from sources of ignition, heat and oxidising agents. Do not cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.

### 8. FIRST AID

SKIN:	Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES:	Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is any irritation.
INHALATION:	Remove from contaminated area promptly. <b>CAUTION: Rescuer must not endanger himself!</b> If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION:	Give plenty of water to dilute product. Do not induce vomiting (see below). Keep victim quiet. If vomiting occurs, keep victim's head below the hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this product. The stomach should be emptied under medical supervision, after the installation of an airway to protect the lungs.

Emergency telephone numbers - weekdays from 8:00 - 5:00 (705) 436-5580  
at all other times (800) 567-7455 (Philip Environmental)

***The information herein is given in good faith but no warranty, expressed or implied is made.***

*Prepared for Comet Chemical Co. Ltd., by Nicholas Morgan, October 2002; Revised August 2005*

**PLEASE ENSURE THAT THIS MSDS IS GIVEN TO AND EXPLAINED TO THE PERSON USING THIS PRODUCT.**