

# MATERIAL SAFETY DATA SHEET

## GLYKOOL PG™

### SECTION 1: PRODUCT IDENTIFICATION

#### Material Identification

PRODUCT NAME: **GLYKOOL PG**  
CHEMICAL FAMILY: Mixture; Inhibited Propylene Glycol

#### Company Identification

**Distributor**  
Loikits Industrial Services, Inc.  
5250 West Coplay Road  
Whitehall, PA 18052

**TELEPHONE NUMBERS**  
Product Information: 610.262.3681  
Emergency Phone: CHEMTREC 800.424.9300

#### Date of Preparation

March 20, 2007

#### Revision Date

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Material</u>	<u>CAS NO.</u>	<u>WT.%</u>	<u>OSHA PEL (TWA)</u>	<u>ACGIH TLV (TWA)</u>	<u>E.U. Classification</u>
Propylene Glycol	57-55-6	>95%	-----	-----	-----
Inhibitor GlyKool PE-1	Proprietary	Balance	-----	-----	-----

NE = Not Established

C = Ceiling Level

See Section 16 for Definitions of Terms Used.

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

### SECTION 3: HAZARD IDENTIFICATION

#### EMERGENCY OVERVIEW

##### Physical Appearance

This product is clear, odorless, syrupy liquid.

##### Immediate Concerns

Vapors and mists from this product may be irritating if inhaled. The solution can be irritating to contaminated skin or eyes. This product must be substantially preheated before ignition occurs. This product is not reactive. If involved in a fire, this liquid will release toxic gases (i.e. carbon monoxide and carbon dioxide)

##### Inhalation

Vapor or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the

nose and throat, headache, nausea, and drowsiness.

**Eyes**

May cause minimal irritation, experienced as temporary discomfort.

**Skin**

Brief contact is not irritating. Prolonged contact may cause skin irritation, seen as local redness with mild discomfort. Based on clinical tests, skin absorption is a potential route of over-exposure for Propylene Glycol.

**Ingestion**

Ingestion of this product, while not likely to occur in an industrial setting, may cause irritation of the mouth and throat, gastric upset, nausea and vomiting.

**Inhalation**

Vapor or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

**Health Effects from Overexposure**

ACUTE: Inhalation of the mists or vapors of this product may be irritating to the nose, throat, mucous membranes, and other tissues of the respiratory system. This product may also be irritating to contaminated skin or eyes.  
CHRONIC: Prolonged or repeated skin exposures may cause irritation, which could lead to dermatitis (dry, chapped skin).

**HAZARDOUS MATERIAL INFORMATION SYSTEM**

	<u>HMIS</u>
<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>REACTIVITY</b>	<b>0</b>

KEY: 4=severe 3=serious 2=moderate 1=slight 0=minimal

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**SECTION 4: FIRST-AID MEASURES**

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**Skin Exposure**

Wash skin with plenty of soap and water for several minutes. The minimum recommended flushing time is 15 minutes. Contaminated individual must seek medical attention, especially if irritation or redness develops.

**Eye Exposure**

If this product enters the eyes, open victim's eyes while under gentle running water. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek immediate medical attention, especially if symptoms persist.

**Inhalation**

If vapors or mists of this product are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

**Ingestion**

Hazard from swallowing this product is not expected to be serious. If symptoms develop, seek medical attention.

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**SECTION 5: FIRE-FIGHTING MEASURES**

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**Flammable Properties**

FLASH POINT (TCC):	99°C (210°F), Closed Cup
AUTOIGNITION TEMPERATURE:	371°C (700°F)
FLAMMABLE LIMITS:	
Lower (LEL):	2.6%

Upper (UEL): 12.5%

### Extinguishing Media

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

### Fire-Fighting Instructions

Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move fire-exposed containers if it can be done without risk to firefighters. If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally areas. Decontaminate fire-response equipment with soap and water solution if necessary.

### NFPA RATING

	<u>NFPA</u>
HEALTH	0
FLAMMABILITY	1
REACTIVITY	0

KEY: 4=severe 3=serious 2=moderate 1=slight 0=minimal

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### Spill and Leak Response

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. (Level D) In case of an uncontrolled release, clear the affected area, protect people, and respond with trained personnel.

SMALL SPILL: Cover with absorbent material (floor absorbent, vermiculite, etc.) Soak up spill and place material into a drum.

LARGE SPILL: Personnel involved with large releases should wear protective equipment. Stop spill at source, dike the area surrounding the spill to prevent further exposure. Prevent material from entering sewer system. If necessary, absorbents such as vermiculite, clay floor absorbent may be used on spill and shoveled into drums. Decontaminate the area thoroughly. If necessary, decontaminate spill response equipment with soap and water solution. Dispose of in accordance with Federal, State and local hazardous waste disposal regulations (see Section 13, Disposal Considerations).

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## SECTION 7: HANDLING AND STORAGE

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### Storage and Handling Practices

Use in a well-ventilated location. Open drums and other containers of this product slowly, on a stable surface. Empty drums and containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Store drums and other containers in a cool, dry location, away from direct sunlight, or sources of intense heat. Do not store in galvanized steel. Storage areas should be made of fire-resistant materials. Keep containers away from incompatible chemicals (See Section 10, Stability and Reactivity).

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## SECTION 8: EXPOSURE CONTROLS - PERSONAL PROTECTION

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### Engineering Controls

Use with adequate ventilation. Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure. Local exhaust ventilation may be necessary when this material is heated or a mist created. Prudent practice is to ensure eyewash/safety shower stations are available near areas where this product is used.

### Personal Protective Equipment

RESPIRATORY PROTECTION: None needed for normal circumstances of use. If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134, or applicable State regulations. Use supplied air respiration protection if oxygen levels are below 19.5% or are unknown.

EYE PROTECTION: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

HAND PROTECTION: Wear butyl rubber, natural rubber, neoprene, Nitrile rubber, or other suitable gloves for routine industrial use.

BODY PROTECTION: Use body protection appropriate for task.

PERSONAL PROTECTIVE EQUIPMENT LEVEL: D

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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Unless otherwise specified, the following information is available for Propylene Glycol, the main component of this product.

RELATIVE VAPOR DENSITY (air = 1):	2.62
FREEZING/MELTING POINT: (95% Concentration)	-51°C (-60°F)
EVAPORATION RATE (n-BuAc=1):	Not available.
SPECIFIC GRAVITY (water = 1):	1.038
SOLUBILITY IN WATER:	Soluble.
VAPOR PRESSURE:	< 1 mmHg @ 25°C (77°F)
VISCOSITY:	< 20cSt@ 40°C (104°F)
ODOR THRESHOLD:	Not applicable.
COEFFICIENT WATER/OIL DISTRIBUTION: (Log P (oct))	-1.41, -0.30
BOILING POINT:	188°C (371°F)
pH:	Approximately 9.0 -10.0
APPEARANCE AND COLOR:	Colorless, odorless, syrupy liquid with a faint, chemical odor. (Alternate colors are available, pending customer preferences)

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## SECTION 10: STABILITY AND REACTIVITY

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### Chemical Stability

Stable.

### Decomposition

May form carbon dioxide and carbon monoxide.

### Incompatible with Other Materials

Strong oxidizers, strong acids, strong bases.

### Hazardous Polymerization

Will not occur.

### Conditions to Avoid

Contact with incompatible chemicals. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### General Toxicity Information

Additional toxicology information for components greater listed in Section 2 (Composition and Information on

Ingredients) in concentration is provided below.

EYES: (Draize) Believe to be < 15.00/110 (rabbit) no appreciable effect

SKIN: Dermal (rabbit)= LD<sub>50</sub>: 2.00g/kg

INGESTION: Oral (rat)= LD<sub>50</sub>:20g/kg

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**SECTION 12: ECOLOGICAL INFORMATION**

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**Environmental Fate & Ecotoxicity Data**

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into water, this material is expected to readily biodegrade. 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.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**Waste Disposal**

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

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**SECTION 14: TRANSPORTATION INFORMATION**

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**Shipping Information**

This material is not hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation (DOT).

Proper Shipping Name:	Not applicable.
Hazard Class Number and Description:	Not applicable.
UN Identification Number:	Not applicable.
Packaging Group:	Not applicable.
DOT Label(s) Required:	Not applicable.

**Marine Pollutant**

No component of this product is classified as a Marine Pollutant, as per Appendix B to 49 CFR 172.101.

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**SECTION 15: REGULATORY INFORMATION**

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**US Federal Regulations****A: General Product Information**

STATE REGULATORY INFORMATION LIST: CT (CONNECTICUT), FL (FLORIDA), IL (ILLINOIS), MI (MICHIGAN), LA (LOUISIANA), MA (MASSACHUSETTS), NJ (NEW JERSEY), PA (PENNSYLVANIA), RI (RHODE ISLAND)

**B: Component Analysis**

SARA SECTION 302/304: Contain no chemicals subject to SARA 302/304 reporting.

SARA SECTION 311/312 Hazard Class: 40 CFR 370.2: Delayed (x)

SARA SECTION 313: Contain no chemicals subject to SARA 313 reporting.

SARA THRESHOLD PLANNING QUANTITY: Not applicable.

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

CALIFORNIA PROPOSITION 65: No component of this product is on the California Proposition 65 lists.

**C: Additional Canadian Regulations**

CANADIAN DSL/NDSL INVENTORY STATUS: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (AICS)

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**SECTION 16: OTHER INFORMATION**

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The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Loikits Industrial Services, Inc. Heat Transfer Fluids assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Loikits Industrial Services, Inc. Heat Transfer Fluids assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

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**DEFINITIONS OF TERMS**

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**Key/Legend**

ppm = parts per million; mg/m<sup>3</sup> = milligrams per cubic meter of air; mppcf = million of particles per cubic foot of air; f/cc = fibers per cubic centimeter of air; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; TWA = 8-hour, time-weighted average; STEL = short-term exposure limit; EPA = Environmental Protection Agency; TSCA = Toxic Substances Control Act; DSL = Canada Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; ECL = Korea Existing and Evaluated Chemical Substances Inventory; ENCS = Japan Existing and New Chemical Substances Inventory; PICCS = Philippines Inventory of Chemicals Substances; AICS = Australia Inventory of Chemicals Substances; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; PMN = Premanufacture Notification; DSL = Domestic Substance List; NFPA = National Fire Protection Association; WHMIS = Workplace Hazardous Materials Identification System; HEPA = High Efficiency Particulate Air; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act; NJTSR = New Jersey Trade Secret Registry; EPCRA = Emergency Planning and Community Right-to-Know Act (SARA, Title III); 302 = Extremely Hazardous Substance; HAP = Clean Air Act Hazardous Air Pollutant; TPQ = Threshold Planning Quantity; RQ = Reportable Quantity; NA = Not Available; NR = Not Regulated