Dynalene LC-PG

1. Product and Company Identification

1.1 Product identifiers

Product Name: Dynalene LC-PG (includes all concentrations/dyes)
Producer: Dynalene, Inc.
Product Number: Not available.
CAS-No.: Not available.

1.2 Identified uses of the product and uses advised against

Identified Uses: Heat transfer fluid.

1.3 Details of the chemical supplier

Company: Dynalene, Inc.
5250 West Coplay Road
Whitehall, PA 18052
USA
Telephone: +1 610-262-9686
Email: info@dynalene.com

1.4 Emergency telephone number

Within the U.S.: +1 800-424-9300 (CHEMTREC)
Outside the U.S.: +1 703-527-3887 (CHEMTREC)

2. Hazards Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No substance is assessed as PBT or vPvB. No substances are known to have endocrine disrupting properties.

3. Composition/Information on Ingredients

3.1 Product mixture

Synonyms: Mixture.
Molecular Wt: Not available.
CAS-No.: Not available.

Ingredients	Classification	CAS-No.	Concentration
Propylene glycol	Not hazardous.	57-55-6	10-100%
Inhibitor solution (trade secret)	Not hazardous.	n/a	<12%

4. First Aid Measures

4.1 Description of first aid measures

Skin exposure

Wash off with soap and water. Consult a physician.

Eye exposure
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water and consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
There are no serious effects expected as a result of exposure to propylene glycol. Minor irritation may occur with exposure to eyes or skin. The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

5. Fire Fighting Measures

5.1 Suitable (and unsuitable) extinguishing media
Suitable: Water spray, carbon dioxide, foam, dry chemical, Halon, any "ABC" class.

5.2 Specific hazards arising from the chemical
When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., carbon oxides).

5.3 Advice for firefighters
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 environmental areas.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures
Proper protective equipment should be used. In case of an uncontrolled release, clear the affected area, protect people, and respond with trained personnel. Avoid breathing vapors. Ensure adequate ventilation.

6.2 Environmental precautions
Do not let product enter drains or surface and ground water sources.

6.3 Methods and materials for containment and cleaning up

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

6.4 References to other sections
For disposal see section 13.

7. Handling and Storage

7.1 General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke in work areas. Wash hands before breaks and at the end of the day.

7.2 Precautions for safe handling

Use in a well-ventilated location. Open drums and other containers of this product slowly, on a stable surface. Drums and other containers of this product should be properly labeled. Keep containers tightly closed.

7.3 Conditions for safe storage, including any incompatibilities

Move drums of this product carefully, with the appropriate drum-handling equipment. Store drums and other containers in cool, dry locations, away from direct sunlight, or sources of intense heat. Storage areas should be made of fire-resistant materials. Keep containers away from incompatible chemicals.

8. Exposure Controls/Personal Protection

8.1 Control and exposure limits recommended by the chemical manufacturer

USA Workplace Environmental Exposure Levels (WEEL): 10 mg/m^3 (propylene glycol, TWA value)

8.2 Appropriate engineering controls

Use with adequate ventilation to minimize exposure to mists or sprays of this product. Prudent practice is to ensure eyewash/safety shower stations are available near areas where this product is used. Monitoring of oxygen level is recommended.

8.3 Individual protection measures, such as personal protective equipment

All personnel handling the product should use a personal protective equipment level D.

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

Wear safety glasses with side shields.

Hand protection

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

Body protection

Wear protective clothing.

Thermal hazards

This material does not present any thermal hazard under normal circumstances of use.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a)	Physical state	Liquid.
b)	Color	Clear, colorless
c)	Odor	Odorless. Odor threshold: No data available.
d)	Melting/freezing point	-51.1°C (-60°F), for 95% concentration.
e)	Boiling point	>100°C (>212°F)
f)	Flammability	Can burn at 100% concentration
g)	Upper/lower flammability or explosive limits	Upper (UEL): 12.5% (V) Lower (LEL): 2.6% (V) [UEL/LEL for propylene glycol]
h)	Flash point	108°C (226°F), for 100% Dynalene PG None for concentrations <80%
i)	Auto-ignition temperature	371.1°C (700°F) [for propylene glycol]

j)	Decomposition temperature	Not available.
k)	pH	7.0 – 9.0
l)	Kinematic viscosity	>1.0 mm^2/s at 25°C (77°F)
m)	Water solubility	Soluble.
n)	Partition coefficient: n-octanol/water	logP = -1.41, -0.30
o)	Vapor pressure	0.08 mmHg at 25°C (77°F)
p)	Density	1.0 – 1.1 g/cm^3 at 25°C (77°F)
q)	Vapor density	2.62 (Air = 1.0)
r)	Particle characteristics	Not applicable

9.2 Other information
None.

10. Stability and Reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under ordinary conditions of use and storage.

10.3 Possibility of hazardous reactions
Reactions with incompatible materials may create carbon monoxide and other toxic vapors.

10.4 Conditions to avoid
High temperatures, oxidizing conditions, contact with incompatible chemicals.

10.5 Incompatible materials
Strong oxidizers, strong acids, acid chlorides, acid anhydrides, chloroformates, or strong reducing agents.

10.6 Hazardous decomposition products
May create carbon monoxide and other toxic vapors (thermal decomposition).

11. Toxicological Information

11.1 Information on toxicological effects

For propylene glycol

LD50 oral, rat:	22 000 mg/kg
LD50 dermal, rabbit:	2 000 mg/kg

Skin corrosion/irritation
Skin – human. Result: mild skin irritation, 7d. Not enough for classification.

Serious eye damage/eye irritation
Eyes – rabbit. Result: mild eye irritation. Not enough for classification.

Respiratory or skin sensitization
This product is not reported to have any sensitization effects.

Germ cell mutagenicity
This product is not reported to have any negative effects.

Suspected cancer agent

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH, NTP, OSHA, or IARC.

Irritancy of product
This product may cause irritation to contaminated tissues.

Reproductive toxicity
This product is not reported to produce mutagenic, embryotoxic, teratogenic, or reproductive effects in humans.

STOT - single exposure
This product is not reported to have any negative effects.

STOT - repeated exposure
This product is not reported to have any negative effects.

Aspiration hazard
This product is not reported to have any negative effects.

11.2 Information on other hazards
None.

12. Ecological Information

12.1 Ecotoxicity (aquatic and terrestrial)
This product may be harmful to aquatic life if large quantities are released into bodies of water.

Propylene glycol

Toxicity to fish:	LD50 – Oncorhyncus mykiss – 40 613 mg/L, 96h
Toxicity to invertebrates:	LC50 – Ceriodaphnia dubia – 18 340 mg/L, 48h (fresh water)
	LC50 – Mysidopsis bahia – 18 800 mg/L, 96h (marine water)
	EC50 – Selenastrum capricornutum – 19 000 mg/L, 96h (fresh water)
	EC50 – Skeletonema costatum – 19 100 mg/L, 48h (marine water)

12.3 Bioaccumulative potential
Propylene glycol is expected to readily biodegrade.

12.4 Mobility in soil
High (Log K_{OC} = 1).

12.5 Results of PBT and vPvB assessment
According to regulation (EU) 1907/2006, no substance is assessed as PBT or vPvB.

12.6 Endocrine disrupting properties
No substances are known to have endocrine disrupting properties according to Regulations (EU) 1907/2006, (EU) 2017/2100, (EU) 2018/605

12.7 Other adverse effects
None known.

13. Disposal Considerations

13.1 Waste treatment methods
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.

14. Transport Information

UN Number: Not applicable.

UN Proper Shipping Name: Not applicable.
Packing Group: Not applicable.

DOT / IMDG / IATA
Not dangerous goods.

15. Regulatory Information

SARA 302 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 No SARA hazards

Massachusetts Right To Know No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Propane-1,2-diol CAS-No. 57-55-6

New Jersey Right To Know No components are subject to the New Jersey Right to Know Act.

TSCA All components of this product are on the Toxic Substance Control Act Inventory.

EINECS All components of this product are on the European Inventory of Existing Commercial Chemical Substances.

California Prop 65 This product does not contain ingredients that cause cancer or reproductive harm known to the state of California.

Canada DSL All components of this product are on the Canadian Domestic Substance List.

16. Other Information

Hazard Statement: Not a hazardous substance or mixture.

Revision Date: 3 October 2024

This SDS was prepared by Dynalene, Inc.

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. Dynalene 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, Dynalene 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 their use of the material.