Dynalene PEG (heat transfer fluid)

1. Product and Company Identification

1.1 Product identifiers

Product Name: Dynalene PEG (includes PEG-200, PEG-300, PEG-400, & PEG-600)
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
Fax: +1 610-262-7437

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

None.

3. Composition/Information on Ingredients

3.1 Product mixture

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

Ingredients	Classification	CAS-No.	EC-No.	Concentration
Polyethylene glycol	Not hazardous.	25322-68-3	500-038-2	>99%

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
The most important known symptoms and effects are described in the labelling (see section 2.2) and 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.

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. 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 (polyethylene 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 impervious clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Clear, viscous liquid at 25°C (77°F).
b) Odor	Odorless.
c) Odor threshold	No data available.
d) pH	7.0 - 11.0
e) Melting/freezing point	<20°C (68°F).
f) Boiling point	>100°C (>212°F)
g) Flash point (closed)	PEG-200: 185°C (365°F) PEG-300: 218°C (424°F) PEG-400: 227°C (441°F) PEG-600: 238°C (460°F)
h) Evaporation rate	No data available.
i) Flammability (solid, gas)	No data available.
j) Upper/lower flammability or explosive limits	Upper (UEL): No data available. Lower (LEL): No data available.
k) Vapor pressure	<0.01 mmHg at 20°C (68°F)
l) Vapor density	No data available.
m) Relative density	>1.0 g/cm^3 at 25°C (77°F)
n) Water solubility	Soluble.
o) Partition coefficient: n-octanol/water	logP = No data available.

p) Auto-ignition temp	No data available.
q) Decomposition temp	No data available.
r) Viscosity	>1.0 cP at 25°C (77°F)

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
Stable under ordinary conditions of use and storage.

10.4 Conditions to avoid
Contact with incompatible chemicals and exposure to extremely high temperatures.

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

10.6 Hazardous decomposition products
Mainly carbon dioxide and carbon monoxide.

11. Toxicological Information

11.1 Information on toxicological effects

For polyethylene glycol

LD50 Oral, rat:	>5,000 mg/kg
LD50 Dermal, rabbit:	>5000 mg/kg
Inhalation:	No data available.

Skin corrosion/irritation
No data available.

Serious eye damage/eye irritation

Eyes, rabbit:	No eye irritation.

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.

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.

Polyethylene glycol

Toxicity to fish:	Static test – Leuciscus idus (Golden orfe) – 500 mg/L, 96h.

12.2 Persistence and degradability
Biodegradable.

12.3 Mobility in soil
No data available.

12.4 Other adverse effects
None.

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
Not dangerous goods.

IMDG
Not dangerous goods.

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	Polyethylene Glycol	CAS-No. 25322-68-3
New Jersey Right To Know	Polyethylene Glycol	CAS-No. 25322-68-3
TSCA	The following components are on the Toxic Substance Control Act Inventory: Polyethylene Glycol CAS-No. 25322-68-3	
EINECS	None of the components of this product is 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	The following components of this product are on the Canadian Domestic Substance List: Polyethylene Glycol CAS-No. 25322-68-3	

16. Other Information

Revision Date
25 January 2019

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 his use of the material.