## Dynalene LO-230

#### 1. Product and Company Identification

#### 1.1 Product identifiers

Product Name:Dynalene LO-230Producer: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

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Aspiration hazard (Category 1), H304

#### 2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Danger

Hazard statement(s) H304

May be fatal if swallowed and enters airways.

Precautionary statement(s) IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Store locked up. Dispose of contents/container to an approved waste disposal plant.

# 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.	Concentration
Aliphatic hydrocarbon blend	Asp. Haz. 1; H304	Not available.	100%

#### 4. First Aid Measures

#### 4.1 Description of first aid measures

#### Skin exposure

If this product contaminates the skin, wash off with soap and plenty of water. Consult a physician.

#### Eye exposure

If this product enters the eyes, rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### Inhalation

If mists of this product are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Consult a physician.

#### Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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** Treat symptomatically.

#### 5. Fire Fighting Measures

#### **5.1** Suitable (and unsuitable) extinguishing media Suitable: Water fog, carbon dioxide, foam, dry chemical, any ABC class. Unsuitable: Straight streams of water.

#### 5.2 Specific hazards arising from the chemical

Combustion products may include airborne solid and liquid particulates and gases (smoke). Carbon monoxide, oxides of sulphur, and unidentified organic and inorganic compounds. Vapor is heavier than air and spreads along the ground.

#### 5.3 Advice for firefighters

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.

#### 5.4 Further information

Use water spray to cool unopened containers. Remove containers from danger zone.

#### 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment, and emergency procedures

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of an uncontrolled release, clear the affected area, protect people, and respond with trained personnel. Remove all possible sources of ignition. Disperse gas to safe location by using fog sprays. Take precautionary measures against static discharge. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

#### 6.2 Environmental precautions

Do not let product enter drains, waterways, basements or confined areas.

#### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Eliminate sources of ignition. Contain spillage with sand or earth, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Soak up with appropriate absorbent material and dispose of safely. Keep public away and advise authorities.

#### Water spill

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersant may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

#### 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. Avoid breathing vapors or contact with material.

#### 7.2 Precautions for safe handling

All employees who handle this material should be trained to handle it safely. 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. Empty drums and containers may contain residual amounts of this product, therefore, empty containers should be handled with care. Keep away from heat and sources of ignition – no smoking. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use proper bonding and/or grounding procedures. Do NOT pressurize, cut, heat, or weld containers.

#### 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. Keep containers tightly closed and in dry, well-ventilated places. Do not eat or drink around this material.

#### 8. Exposure Controls/Personal Protection

### 8.1 Control and exposure limits recommended by the chemical manufacturer

ACGIH TWA (Inhalable fraction): 5 mg/m<sup>3</sup> for hydrotreated, middle distillates (petroleum).

#### 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. Decontaminate the area thoroughly. If necessary, decontaminate spill response equipment with soap and water solution

#### 8.3 Individual protection measures, such as 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

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**

Complete suit protecting against chemicals. Impervious clothing.

#### 9. Physical and Chemical Properties

#### 9.1 Information on basic physical and chemical properties

a) Appearance	Liquid, clear.
b) Odor	Hydrocarbon-like.
c) Odor threshold	No data available.
d) pH	Not applicable.
e) Melting/freezing point	< -40°C (< -40°F)
f) Boiling point	> 269°C (> 516°F)
g) Flash point	> 110°C (> 230°F); closed-cup
h) Evaporation rate	< 0.01 [Calculated]
i) Flammability (solid, gas)	No data available.
<ul> <li>j) Upper/lower flammability or explosive limits</li> </ul>	Upper (UEL): 5.0% (V) Lower (LEL): 0.4% (V)
k) Vapor pressure	<1.0 mmHg at 25°C (77°F)
I) Relative vapor density	8 at 101 kPa [Calculated]
m) Relative density	0.80 g/cm <sup>3</sup> at 25°C (77°F)
n) Water solubility	Negligible.
<ul> <li>o) Partition coefficient: n- octanol/water</li> </ul>	No data available.
p) Auto-ignition temp	325°C (617°F)
q) Decomposition temp	No data available.
r) Viscosity	14 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

Hazardous polymerization will not occur.

#### 10.4 Conditions to avoid

Contact with incompatible chemicals and exposure to extremely high temperatures. Avoid open flames and high energy ignition sources.

#### 10.5 Incompatible materials

Strong oxidizers, strong acids, acid chlorides, acid anhydrides, chloroformates, organic materials, cyanides, thiocyanates, or strong reducing agents.

#### **10.6 Hazardous decomposition products**

Material does not decompose at ambient temperatures. Hazardous gases and vapors produced in fire. Oxides of carbon. In the event of fire, see section 5.

#### 11. Toxicological Information

#### 11.1 Information on toxicological effects

#### Acute toxicity

LC50 Inhaled – rat:	> 5266 mg/m <sup>3</sup> (Aerosol)
LD50 Oral – rat:	> 5,000 mg/kg
LD50 Dermal – rabbit:	2,000 – 4,000 mg/kg

#### Skin corrosion/ irritation

May dry skin leading to discomfort and dermatitis, based on test data for structurally similar material.

#### Serious eye damage/eye irritation

May cause mild, short-lasting discomfort to eyes, based on test data for structurally similar material.

#### 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 IARC, ACGIH, NTP, or OSHA.

#### 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.

#### Medical conditions aggravated by exposure

It is anticipated that mainly skin, eye, and respiratory disorders may be aggravated after over-exposure.

#### **Biological exposure indices**

Currently, there are no Biological Indices (BEIs) associated with the components of this product.

#### **12. Ecological Information**

#### 12.1 Ecotoxicity (aquatic and terrestrial)

Not expected to be harmful to aquatic organisms. Not expected to demonstrate chronic toxicity to aquatic organisms.

#### 12.2 Persistence and degradability

Expected to biodegrade slowly. Transformation due to hydrolysis or photolysis not expected to be significant.

#### 12.3 Mobility in soil

Low water solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

#### 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

#### DOT / IMDG / IATA

Not dangerous goods.

#### Marine pollutant

No component of this product is listed as a Marine Pollutant (49 CFR 172.101, Appendix B).

#### Transport Canada transportation of dangerous goods regulations

This material is not considered as dangerous goods.

#### **15. Regulatory Information**

SARA 302 SARA 313	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302 (Extremely Hazardous Substances). 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 (Toxics Release Inventory Chemicals).
SARA 311/312	(Emergency Planning and Community Right-to-Know Act): Aspiration hazard.
Massachusetts Right To Know Pennsylvania Right	No components are subject to the Massachusetts Right to Know Act.
To Know New Jersey Right	No components are subject to the Pennsylvania Right to Know Act.
To Know	No components are subject to the New Jersey Right to Know Act.
TSCA	All of the components of this product are on the Toxic Substance Control Act Inventory.
EINECS	All of the 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 of the components of this product are on the Canadian Domestic Substance List.

#### 16. Other Information

#### **Revision Date** 27 July 2020

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.