

# Dynalene HF-LO (aliphatic hydrocarbon)

## 1. Product and Company Identification

### 1.1 Product identifiers

Product Name: Dynalene HF-LO  
 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

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Combustible liquid (Category 4), H227  
 Aspiration hazard (Category 1), H304

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H227 Combustible liquid.  
 H304 May be fatal if swallowed and enters airways.

Precautionary statement(s)

P210 Keep away from heat/sparks/flames/hot surfaces. – No smoking.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P331 Do NOT induce vomiting.  
 P370+P378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.  
 P403+P405 +P235 Store locked up in a well-ventilated place. Keep cool.  
 P501 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	Comb Liq 4; Asp. Haz. 1; H227 H304	n/a	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 spray, carbon dioxide, foam, dry chemical, any ABC class.

#### 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.

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

Sweep up and shovel. 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 (Non-aerosol): 200 mg/m<sup>3</sup> for hydrotreated, light 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	No data available.
e) Melting/freezing point	<-118°C (<-180°F), pour point.
f) Boiling point	>191°C (>376°F)
g) Flash point	>61°C (>142°F), closed cup.
h) Evaporation rate	0.04 at 1 atm.
i) Flammability (solid, gas)	No data available.
j) Upper/lower flammability or explosive limits	Upper (UEL): 5.3% (V) Lower (LEL): 0.7% (V)
k) Vapor pressure	0.48 mmHg at 25°C (77°F)
l) Relative vapor density	5.9 at 1 atm (Air = 1)
m) Relative density	0.75 g/cm <sup>3</sup> at 25°C (77°F)
n) Water solubility	Negligible.
o) Partition coefficient: n-octanol/water	No data available.
p) Auto-ignition temp	338°C (640°F)
q) Decomposition temp	No data available.
r) Viscosity	2.0 cSt 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

No data available.

### 10.4 Conditions to avoid

Contact with incompatible chemicals and exposure to extremely high temperatures. Avoid electrical sparks and other sources of ignition.

### 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**

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**

LD50 Oral – rat: >5,000 mg/kg

LD50 Dermal – rabbit: 2,000 – 4,000 mg/kg

**Skin corrosion/ irritation**

No data available.

**Serious eye damage/eye irritation**

No data available.

**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)**

This product may be harmful to aquatic life if large quantities are released into bodies of water.

No data available.

**12.2 Persistence and degradability**

No data available.

**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

Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.  
Hazard Class & Division: COMBUSTIBLE LIQUID  
ID Number: 1268  
Packing Group: III  
ERG Number: 128  
Transport Document Name: UN1268, PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, PG III

### LAND (TDG)

Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.  
Hazard Class: 3  
UN Number: 1268  
Packing Group: III

### LAND (ADR)

Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.  
Hazard Class: 3  
Classification: F1  
UN Number: 1268  
Packing Group: III  
Danger Number: 30  
Transport Category: 3  
Tunnel Code: (D/E)  
Special Provisions: 363 664  
Limited Quantity: 5L  
Excepted Quantity: E1  
Tank Codes for ADR Tanks: LGBF  
Vehicle for Tank Carriage: FL  
Portable Tank and Bulk Container Instructions: T4  
Portable Tank and Bulk Container Special Provisions: TP1 TP29  
Mixed Packing Provisions: MP19  
Packing Instructions: P001 IBC03 LP01 R001

### SEA (IMDG)

Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.  
Hazard Class: 3  
EMS Number: F-E, S-E  
UN Number: 1268  
Packing Group: III  
Label(s): 3  
Transport Document Name: UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG III, (49°C c.c.)

### AIR (IATA)

Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.  
Hazard Class: 3  
UN Number: 1268  
Packing Group: III  
Label(s): 3  
Transport Document Name: UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG III

---

## 15. Regulatory Information

### SARA Reporting Requirements

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302 or 313.  
SARA 311/312 Classifications: Fire, acute health hazard.

---

## 16. Other Information

**Revision Date**  
May 25<sup>th</sup>, 2015

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.