Dynalene SF (hydrocarbon mixture)

1. Product and Company Identification

1.1 Product identifiers

| Product Name: | Dynalene SF |
|-----------------|----------------|
| Producer: | Dynalene, Inc. |
| Product Number: | Not available. |
| CAS-No.: | 68515-32-2 |

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) Skin irritation (Category 2), H315 Eye irritation (Category 2B), H320

2.2 GHS Label elements, including precautionary statements

Pictogram



| Signal word | Warning |
|----------------------------|--|
| Hazard statement(s) | |
| H315 | Causes skin irritation. |
| H320 | Causes eye irritation. |
| Precautionary statement(s) | |
| P264 | Wash skin thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| 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: Molecular Wt: CAS-No.: EC-No.: | 68515-32 | Aixture. Iot available. 8515-32-2 71-073-6 | | | |
|---|----------|---|------------|-----------|---------------|
| Ingredients | | Classification | CAS-No. | EC-No. | Concentration |
| Benzene, mono-C1 Derivs., fractionati | 2 | Skin Irrit 2; Eye Irrit 2B; H315, H320 | 68515-32-2 | 271-073-6 | 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. 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 (Non-aerosol): 200 mg/m³ for petroleum distillates, intermediate.

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 | <-40°C (<-40°F) |
| f) Boiling point | >330°C (>626°F) |
| g) Flash point | 180°C (356°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 | No data available. |
| l) Relative vapor density | >1 (Air = 1) |
| m) Relative density | 0.88 g/cm ³ at 25°C (77°F) |
| n) Water solubility | Negligible. |
| o) Partition coefficient: n- octanol/water | No data available. |
| p) Auto-ignition temp | 330°C (626°F) |
| q) Decomposition temp | No data available. |
| r) Viscosity | 23.2 cSt at 38°C (100°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: LD50 Dermal – rabbit: >5,000 mg/kg 2,000 – 4,000 mg/kg

Skin corrosion/ irritation Skin irritation – rabbit.

Serious eye damage/eye irritation Eye irritation – rabbit, 24h.

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

| UN Number: | Not applicable. |
|--------------------------|-----------------|
| Class: | Not applicable. |
| UN Proper Shipping Name: | Not applicable. |
| Packing Group: | Not applicable. |

IMDG

Not dangerous goods.

IATA

Not dangerous goods ..

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: Not hazardous.

TSCA Inventory Status

The components of this product listed in Section 3 are on the TSCA Inventory.

Clean Air Act

This material does not contain any hazardous air pollutants, class 1, or class 2 ozone depletors.

Clean Water Act

None of the chemicals in this product are listed as hazardous substances, priority pollutants, or toxic pollutants under the CWA.

WHMIS Classification

No ingredients are hazardous according to the CPR criteria.

International Regulations

| Hazard symbols: Risk phrases: | Xi R36/37/38 | Irritating to eyes, respiratory system, and skin. |
|----------------------------------|-----------------|---|
| Safety phrases: | S24/25 S26 | Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |

| Australia. Inventory of Chemical Substances (AICS) | Listed |
|---|------------|
| Japan. Inventory of Existing and New Chemical Substances (ENCS) | Listed |
| Japan. Industrial Safety & Health Law (ISHL) Inventory | Not listed |
| Canada. Domestic Substances List (DSL) Inventory | Not listed |
| Canadian Non-Domestic Substance Listing (NDSL) | Not listed |
| European Inventory of Existing Commercial Chemical Substances | Listed |
| (EINECS) Listing | |
| Philippines. Inventory of Chemicals / Chemical Substances (PICCS) | Not listed |
| Korea. Existing Chemicals Inventory (KECI) | Not listed |
| China. Inventory of Existing Chemical Substances (IECSC) | Listed |
| Mexico. National Inventory of Chemical Substances (INSQ) | Not listed |
| New Zealand. Inventory of Chemicals (NZIoC) | Not listed |

Switzerland. Inventory of Notified New Substances (CHINV) Taiwan. National Exisiting Chemical Inventory (NECI) Listed Not listed

16. Other Information

Revision Date 24 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.