Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: 06.29.2016

Firefly Paraffin Lamp Oil

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Material Name: Firefly Paraffin Lamp Oil
Product code: Firefly Paraffin Lamp Oil

1.2 Relevant identified uses of the substance or mixture and uses advised against: Fuel

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:
Firefly Fuel, Inc.
1550 Global Court
Sarasota, FL 34240 USA
1-(888)-472-6740

Emergency telephone number:
CHEMTREC
1-800-424-9300 (US/Canada)
+01 703-527-3887 (International)

2 Hazards identification

2.1 Classification of the substance or mixture:
Aspiration hazard, category 1.

Hazard-determining components of labeling:
Normal Paraffins, C14-16

2.2 Label elements

Hazard pictograms:

Signal word: Danger
Hazard statements:
H304 May be fatal if swallowed and enters airways.

Precautionary statements:
P301+P310 If swallowed: Immediately call a poison center or doctor/physician.
P331 Do not induce vomiting.
P405 Store locked up.
P501 Dispose of contents and container as instructed in Section 13.

2.3 Other hazards: None known

Information concerning particular hazards for humans and environment:
The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Substance:

<table>
<thead>
<tr>
<th>Identification</th>
<th>Name</th>
<th>Weight %</th>
</tr>
</thead>
</table>

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# Firefly Paraffin Lamp Oil

<table>
<thead>
<tr>
<th>CAS number: 90622-46-1</th>
<th>Normal Paraffins, C14-16</th>
<th>100</th>
</tr>
</thead>
</table>

## 3.2 Mixture: Not applicable

**Additional information:** None

**Full Text of H and EUH statements:** See section 16

## 4 First aid measures

### 4.1 Description of first aid measures

**General information:** None.

**After inhalation:**
- Loosen clothing as necessary and position individual in a comfortable position.
- Maintain an unobstructed airway.
- Get medical advice/attention if you feel unwell.

**After skin contact:**
- Rinse affected area with soap and water.
- If symptoms develop or persist, seek medical attention.

**After eye contact:**
- Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
- If symptoms develop or persist, seek medical attention.

**After swallowing:**
- Rinse mouth thoroughly.
- Seek medical attention if irritation, discomfort, or vomiting persists.

### 4.2 Most important symptoms and effects, both acute and delayed:

None

### 4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

## 5 Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:**
- Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

**Unsuitable extinguishing media:** None

### 5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

### 5.3 Advice for firefighters

**Protective equipment:**
- Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

### 5.4 Additional information:

None

## 6 Accidental release measures

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

- Ensure adequate ventilation.
- Ensure air handling systems are operational.
- Wear protective eye wear, gloves and clothing.

### 6.2 Environmental precautions:

- Should not be released into the environment.
- Prevent from reaching drains, sewer or waterway.

### 6.3 Methods and material for containment and cleaning up:

- Wear protective eye wear, gloves and clothing.
**Firefly Paraffin Lamp Oil**

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).
Dispose of contents / container in accordance with local regulations.

6.4 **Reference to other sections:** None

7 **Handling and storage**

7.1 **Precautions for safe handling:**
Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

7.2 **Conditions for safe storage, including any incompatibilities:**
Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.

7.3 **Specific end use(s):** No additional information.

8 **Exposure controls/personal protection**

8.1 **Control parameters**

**Occupational Exposure limit values:**
No occupational exposure limits noted for the ingredient(s).

**Biological limit value:**
No biological exposure limits noted for the ingredient(s).

**Derived No Effect Level (DNEL):**
Not determined or not applicable.

**Predicted No Effect Concentration (PNEC):**
Not determined or not applicable.

**Information on monitoring procedures:**
Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

8.2 **Exposure controls**

**Appropriate engineering controls:**
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

**Personal protection equipment**

**Eye and face protection:**
Safety goggles or glasses, or appropriate eye protection.

**Skin and body protection:**
Select glove material impermeable and resistant to the substance.
Wear appropriate clothing to prevent any possibility of skin contact.

**Respiratory protection:**
Firefly Paraffin Lamp Oil

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**General hygienic measures:**
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

**Environmental exposure controls:**
Select controls based on a risk assessment of local conditions.
See section 6 for information on accidental release measures.

### 9 Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color)</td>
<td>Colorless liquid</td>
</tr>
<tr>
<td>Explosion limit lower</td>
<td>0.5%</td>
</tr>
<tr>
<td>Explosion limit upper</td>
<td>4.7%</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum-like</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;0.13 hPa (&lt;0.1 mm Hg)</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>4°C (39°F)</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>248°C (478°F)</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>&gt; 3.0 log POW (Estimate)</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>118°C (244°F)</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
<td>204°C (399°F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not determined or not available.</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>3 mPas (Calculated)</td>
</tr>
<tr>
<td>Density</td>
<td>0.77 g/cm³</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>2.3-2.5 cSt (DIN 53211/4)</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

#### 10.1 Reactivity:
Does not react under normal conditions of use and storage.

#### 10.2 Chemical stability:
Stable under normal conditions of use and storage.

#### 10.3 Possibility of hazardous reactions:
Reacts with oxidizing agents.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with peroxides.

#### 10.4 Conditions to avoid:
Excess heat. Keep ignition sources away - Do not smoke.

#### 10.5 Incompatible materials:
Oxidizing agents.
Peroxides.

#### 10.6 Hazardous decomposition products:
None known.

### 11 Toxicological information

#### 11.1 Information on toxicological effects

**Acute toxicity**
Firefly Paraffin Lamp Oil

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Skin corrosion/irritation
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Serious eye damage/irritation
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Respiratory or skin sensitization
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Carcinogenicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.
National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Reproductive Toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (single exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (repeated exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Aspiration toxicity
Assessment: May be fatal if swallowed and enters airways
Product data: No data available.
Substance data: No data available.

Information on likely routes of exposure: No data available.
Symptoms related to the physical, chemical and toxicological characteristics: No data available.
Other information: No data available.

12 Ecological information

12.1 Toxicity
Acute (short-term) toxicity
Assessment: Based on available data, the classification criteria are not met.
**Firefly Paraffin Lamp Oil**

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### 12.2 Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

#### 12.3 Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

#### 12.4 Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

#### 12.5 Results of PBT and vPvB assessment

**PBT assessment:** This product does not contain any substances that are assessed to be a PBT.

**vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

#### 12.6 Other adverse effects:

No data available.

## 13 Disposal considerations

### 13.1 Waste treatment methods

**Relevant information:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. Product is recyclable as a waste oil. Deliver unused and/or contaminated product to waste oil collectors. Contact waste processors for recycling information.

## 14 Transport information

### United States Transportation of dangerous goods (49 CFR DOT)

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.3 UN transport hazard class(es)</td>
<td>None</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>None</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>None</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>None</td>
</tr>
</tbody>
</table>

### International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

<table>
<thead>
<tr>
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### International Carriage of Dangerous Goods by Inland Waterways (ADN)

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<thead>
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## Safety Data Sheet

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</tr>
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### International Maritime Dangerous Goods (IMDG)

<table>
<thead>
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</tr>
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</tbody>
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### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

<table>
<thead>
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<td>None</td>
</tr>
</tbody>
</table>

| 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code |
|-----------------------------|--------------|
| Bulk Name | None |
| Ship type | None |
| Pollution category | None |

### 15 Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

**United States regulations**

- **Inventory listing (TSCA):**
  - 90622-46-1 Normal Paraffins, C14-16 Listed

- **Significant New Use Rule (TSCA Section 5):** Not listed
- **Export notification under TSCA Section 12(b):** Not listed
- **SARA Section 311/312 (Specific toxic chemical listings):**
  - Acute Yes No No No
  - Chronic No No No No

- **SARA Section 302 extremely hazardous substances:** Not listed
- **SARA Section 313 (specific toxic chemical listings):** Not listed
- **CERCLA:** Not listed
- **RCRA:** Not listed
- **Section 112(r) of the Clean Air Act (CAA):** Not listed
- **Massachusetts Right to Know:** Not listed
- **New Jersey Right to Know:** Not listed
- **New York Right to Know:** Not listed
- **Pennsylvania Right to Know:** Not listed
Firefly Paraffin Lamp Oil

California Proposition 65: Not listed

European regulations
Inventory listing (EINECS): Not determined.
REACH SVHC candidate list: Not listed
REACH SVHC Authorizations: Not listed
REACH Restriction: Not listed
Water hazard class (WGK): Not determined.

Canada regulations
Domestic substances list (DSL): Not determined.
Non-domestic substances list (NDSL): Not listed

China regulations
Inventory of Existing Chemical Substances in China (IECSC): Not determined.
Inventory of Prohibited Chemicals: Not listed
Catalog of Hazardous Chemicals: Not listed
List of Toxic Chemicals Restricted to be Imported and Export in China: Not listed
List of Hazardous Chemicals for Priority Management - SAWS: Not listed
The Catalog of Priority Hazardous Chemicals for Environment Management (PHCs)-MEP: Not listed

Australia regulations
Australian Inventory of Chemical Substances (AICS): Not determined.

Japan regulations
Existing and New Chemical Substances (ENCS): Not determined.
Industrial Safety and Health Law (ISHL): Not determined.

Korea regulations
Korea Existing Chemicals List (KECL): Not determined.

New Zealand regulations
New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippine regulations
Philippine Inventory of Chemicals and Chemical Substances (PICCS): Not determined.

Taiwan regulations
Taiwan Chemical Substance Inventory (TCSI): Not determined.

15.2 Chemical Safety Assessment
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Indication of changes:
Not applicable.

Abbreviations and Acronyms: None

Disclaimer:
This product has been classified in accordance within GHS guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet

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