# Material Safety Data Sheet

Prepared according to 29 CFR 1910.1200

## 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Grade No. 2 Heating Oil S-15 Dyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>8177</td>
</tr>
<tr>
<td>CAS Number</td>
<td>64742-80-9</td>
</tr>
<tr>
<td>Generic Chemical Name</td>
<td>Petroleum distillate</td>
</tr>
<tr>
<td>Product Type</td>
<td>Substance</td>
</tr>
<tr>
<td>Transportation Emergency Phone No.</td>
<td>Chemtrec: 1-800-424-9300 (24 HRS)</td>
</tr>
<tr>
<td>ARG Emergency Phone No.</td>
<td>814-368-1297 (24 HRS)</td>
</tr>
<tr>
<td>MSDS E-Mail</td>
<td><a href="mailto:msds@amref.com">msds@amref.com</a></td>
</tr>
</tbody>
</table>

## 2. Hazards Identification

### Appearance
- Red liquid

### Odor
- Petroleum Oil

### Signal Word
- WARNING!
  - Flammable liquid and vapor
  - Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor and may cause flash fire
  - May be fatal if swallowed. Can enter lungs and cause damage
  - Harmful if inhaled
  - Causes skin irritation
  - Causes mild eye irritation
  - May cause chronic effects

### OSHA Regulatory Status
- This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Precautions
- Keep away from heat, sparks and flame. Keep container tightly closed. Use only with adequate ventilation.
- Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.

### Inhalation
- Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.

### Eyes
- Avoid contact with eyes. Wash thoroughly after handling.

### Skin
- Avoid contact with skin and clothing. Wash thoroughly after handling.

### Medical Conditions Aggravated by Exposure
- Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product
2. Hazards Identification

Chronic Effects
See Section 11 for complete health hazard information

Environmental Effects
See Section 12 for complete ecological information

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-80-9</td>
<td>Distillates (petroleum), hydrodesulfurized middle</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eyes
Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation
Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion
DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water. Get medical attention immediately.

Note to Physicians
No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire Fighting Measures

Flammable Properties
This product is a static accumulating liquid. Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminate. Restrict flow velocity to avoid build-up of static charge. Refer to NFPA 77, API 2003, and CENELEC CLC/TR 50404 for further guidance.

Extinguishing Media
Use dry chemical, CO₂, water spray (FOG) or foam

Specific Hazards Arising from Chemical
Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposition products may include the following materials: Carbon dioxide and Carbon monoxide.

Protective Equipment and Precautions for Firefighters
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
6. Accidental Release Measures

**Personal Precautions**
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**Environmental Precautions**
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

**Methods for Containment**
Stop leak if without risk.

**Methods for Cleanup**
Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and Storage

**Handling Procedures**
Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

**Shipping and Storing Procedures**
Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers that retain product residue may be hazardous. Do not reuse container.

8. Exposure Controls / Personal Protection

**Component Exposure Limits**
There are no regulatory exposure limits, however the recommended exposure limit is TWA (Time Weighted Average): 100 mg/m³ (8 hours)

**Engineering Controls**
Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection**
Chemical goggles or face shield.

**Skin Protection**
Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

**Respiratory Protection**
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

**General Hygiene**
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of
8. Exposure Controls / Personal Protection

the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Vapor Pressure (mm Hg at 20°C)</th>
<th>&lt;1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Petroleum Oil</td>
<td>Water Soluble</td>
<td>No</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td>Specific Gravity (g/cc)</td>
<td>.88</td>
</tr>
<tr>
<td>Flash Point (°F)</td>
<td>100</td>
<td>Density (lbs/gal)</td>
<td>7.3</td>
</tr>
<tr>
<td>Boiling Point (°F)</td>
<td>&gt;400</td>
<td>pH</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. Chemical Stability & Reactivity Information

Stability
Stable under normal conditions. If heated, product’s static accumulation will rise and could cause flash fire.

Polymerization
No polymerization

Incompatibility
Strong acids and oxidizing materials

Conditions to Avoid
High temperatures, sparks, flames

Hazardous Decomposition
Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

11. Toxicological Information

Acute Exposure

Respiratory Irritation
Aspiration and inhalation hazard. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Eye Irritation
Causes mild eye irritation. Vapors formed from heating may cause eye irritation.

Skin Irritation
Causes skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness, dermatitis or oil acne.

Sensitization
Not expected to cause skin or respiratory sensitization.

Component Analysis – LD50 / LC50

Acute Toxicity Estimate (ATE) Values for Product:

Inhalation LC50 Rat >18 mg/L 1 HR
Oral LD50 Rat >5000 mg/kg
Dermal LD50 Rabbit >2000 mg/kg

Chronic Exposure

Target Organ Effects
13 week rat study: LOAEL: 30-125 mg/kg NOAEL: ≤30 mg/kg

Carcinogenicity
Dermal carcinogenicity studies indicate that Gas oils and distillate fuels are
potential skin carcinogens after repeated skin application but are not associated with the induction of systemic tumors.

**Mutagenicity**
In vitro genetic toxicity studies demonstrate that gas oil streams and distillate fuels generally induce gene mutation in bacterial and mammalian cells. In vivo studies evaluating cytogenetic damage of a selection of gas oils indicate that most of these substances do not induce chromosome damage or statistically significant increases in micronucleus formation in bone marrow of treated animals when administered orally, dermally or by inhalation, the most realistic routes of human exposure.

**Teratogenicity**
LOAEL: 125-500 mg/kg
NOAEL: 30-500 mg/kg

**Reproductive Toxicity**
The NOAEL for reproductive toxicity is not expected to be lower than the NOAEL for developmental toxicity because the most sensitive endpoints in either developmental or reproductive toxicity studies are expected to be effects on fetal survival and growth resulting from in utero exposure.

**LOAEL:** Lowest Observed Adverse Effect Level
**NOAEL:** No Observed Adverse Effect Level

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**12. Ecological Information**

**Component Analysis- Ecotoxicity – Aquatic Life**

<table>
<thead>
<tr>
<th>Duration/Test/Species</th>
<th>Concentration/Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Pimephales promelas</td>
<td>N/A mg/L</td>
</tr>
</tbody>
</table>

**Degradability**
Not determined

**Bioaccumulation**
Not determined

**Soil Mobility**
Not determined

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**13. Disposal Considerations**

**Disposal Instructions**
The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

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**14. Transportation Information**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NA Number Shipping Name (technical name) Hazard Class</td>
<td>Packing Group Labels/Placard*</td>
<td></td>
</tr>
</tbody>
</table>
14. Transportation Information

<table>
<thead>
<tr>
<th>U.S. DOT</th>
<th>1993</th>
<th>Fuel Oil</th>
<th>Combustible Liquid</th>
<th>III</th>
</tr>
</thead>
</table>

Bulk container must be labeled on two opposing sides

<table>
<thead>
<tr>
<th>U.S. DOT</th>
<th>Non-Bulk</th>
<th>Not Regulated</th>
<th>Exempt from labeling and placarding unless shipped via Air or Vessel</th>
</tr>
</thead>
</table>

*Truck/Rail car must be placarded on all 4 sides if aggregate gross weight exceeds 1,000 pounds

15. Regulatory Information

SARA Extremely Hazardous Substances (Sections 302 & 304)

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311 & 312 Classifications

Acute Hazard: Yes
Chronic Hazard: Yes
Fire Hazard: Yes
Reactivity Hazard: No

CERCLA

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

California Prop 65

This product contains chemical(s) known to the state of California to cause cancer and/or birth defects.

Clean Water Act / Oil Pollution Act

This product contains petroleum distillates and may be subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

Global Chemical Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>All components</td>
<td></td>
</tr>
<tr>
<td>US TSCA</td>
<td>Present</td>
</tr>
<tr>
<td>EU</td>
<td>Present</td>
</tr>
</tbody>
</table>
### Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>Japan</th>
<th>Australia</th>
<th>New Zealand</th>
<th>Canada</th>
<th>Switzerland</th>
<th>Korea</th>
<th>Philippines</th>
<th>China</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Present</td>
<td>Present</td>
</tr>
</tbody>
</table>

### 16. Other Information

#### US NFPA Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

#### HMIS Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Physical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Precautionary Labels

**Signal Word**

DANGER!

- Flammable liquid and vapor
- Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor and may cause flash fire
- May be fatal if swallowed. Can enter lungs and cause damage
- Harmful if inhaled
- Causes skin irritation
- Causes mild eye irritation
- May cause chronic effects

**Preparation/Revision Date**

7/9/2012

**Revision Reason**

Outdated MSDS

**Prepared By:**

Jenna Prechtl, Product Compliance Coordinator

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End of MSDS