



## Safety Data Sheet

Prepared according to GHS

### 1. Identification

**Product Name** Kensol® 50H  
**Product Code** 4118  
**Recommended Use** Ink Oil, Fuel Additives and Drilling Fluids  
**Company** American Refining Group, Inc.  
77 North Kendall Avenue  
Bradford, PA 16701  
www.amref.com  
msds@amref.com  
**Emergency Telephone Number(s)** Chemtrec 1-800-424-9300 (24 HRS)  
ARG: 814-368-1297 (24 HRS)

### 2. Hazards Identification

**GHS Classification** Aspiration Hazard Category 1  
**Signal Word** DANGER!  
**Hazard Statements** May be fatal if swallowed and enters airways.  
**GHS Pictogram**



**Precautionary Statements** If swallowed: immediately call a poison center/ doctor to specify the appropriate source of emergency medical advice.  
Do NOT induce vomiting.

### 3. Composition / Information on Ingredients

| CAS No.    | Component                       | Common Name | Percent |
|------------|---------------------------------|-------------|---------|
| 64742-46-7 | Hydrotreated distillate, middle | Distillate  | 100%    |

### 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.

#### 4. First Aid Measures

**Inhalation**

Get medical attention immediately.  
Product is not expected to present any inhalation hazard at ambient conditions. If aerosolization and/or misting occurs and a person is over-exposed, 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. Seek medical attention immediately.

**Symptoms(Acute and delayed)**

May be fatal if swallowed and enters airways.

**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

**Suitable Extinguishing Media**

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

**Unsuitable Extinguishing Media**

Avoid solid water stream as it may scatter and spread fire.

**Specific Hazards Arising from Chemical**

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposing 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**

Put on appropriate personal protective equipment.

**Environmental Precautions**

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for Containment**

Stop leak if without risk.

**Methods for Cleanup**

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container

#### 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**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from light. Keep

**7. Handling and Storage**

in properly labeled containers. Keep out of the reach of children.

**Incompatibilities:**

Oxidizing Agents

**8. Exposure Controls / Personal Protection**

**Component Exposure Limits**

**Oil Mist (mineral)**

|                   |              |                          |               |                             |
|-------------------|--------------|--------------------------|---------------|-----------------------------|
| <b>ACGIH TLV:</b> | TWA: N/A ppm | TWA: 5 mg/m <sup>3</sup> | STEL: N/A ppm | STEL: 10 mg/m <sup>3</sup>  |
| <b>OSHA PEL:</b>  | TWA: N/A ppm | TWA 5 mg/m <sup>3</sup>  | STEL: N/A ppm | STEL: N/A mg/m <sup>3</sup> |
| <b>NIOSH REL:</b> | TWA: N/A ppm | TWA 5 mg/m <sup>3</sup>  | STEL: N/A ppm | STEL: 10 mg/m <sup>3</sup>  |

N/A signifies not available

**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**

Respirator may only be needed if product is aerosolized and/or misted. 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 the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

**9. Physical and Chemical Properties**

*Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.*

|                                    |                  |   |               |
|------------------------------------|------------------|---|---------------|
| <b>Appearance</b>                  | Clear and bright | <b>Flammability</b>                           | Not Available |
| <b>Physical State</b>              | Liquid           | <b>Upper/Lower Flammability Limits</b>        | Not Available |
| <b>Odor</b>                        | Petroleum Oil    | <b>Vapor Pressure (20°C mm Hg)</b>            | 0.00          |
| <b>Odor Threshold</b>              | Not Available    | <b>Vapor Density</b>                          | Not Available |
| <b>pH</b>                          | Not Available    | <b>Relative Density (lbs/gal)</b>             | 6.8           |
| <b>Melting/Freezing Point (°F)</b> | Not Available    | <b>Water Soluble</b>                          | No            |
| <b>Initial Boiling Point (°F)</b>  | 445-465          | <b>Partition Coefficient: n-octanol/water</b> | 3.3 to >6     |
| <b>Boiling Range (°F)</b>          | 445-525          | <b>Auto-ignition Temperature (°F)</b>         | Not Available |
| <b>Flash Point (°F)</b>            | 230              | <b>Decomposition</b>                          | Not Available |

**9. Physical and Chemical Properties**

|                                  |               |                                     |     |
|----------------------------------|---------------|-------------------------------------|-----|
| Cleveland Open Cup ASTM D-92     |               | Temperature (°F)                    |     |
| Evaporation Rate                 | Not Available | Viscosity (40°C mm <sup>2</sup> /s) | 2.4 |
| Volatile Organic Compounds (g/L) | 814.6         | Aromatic Content (Typical Vol %)    | 10  |

**10. Chemical Stability & Reactivity Information**

|   |  |
|---|--|
| <b>Reactivity</b>                       | Polymerization will not occur  |
| <b>Chemical Stability</b>               | Stable under normal conditions   |
| <b>Hazardous Reactions</b>              | None, under normal processing.   |
| <b>Conditions to Avoid</b>              | High temperatures, flames, sparks  |
| <b>Incompatibility</b>                  | Strong acids and oxidizing materials   |
| <b>Hazardous Decomposition Products</b> | Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. |

**11. Toxicological Information**

|                               |   |
|-------------------------------|---|
| <b>Acute Exposure</b>         |   |
| <b>Respiratory Irritation</b> | An inhalation hazard may only arise if product is used in aerosol conditions or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and upper respiratory tract. Based on data from similar materials. |
| <b>Eye Irritation</b>         | May cause minimal to slight eye irritation if product is splashed in eyes and unwashed  |
| <b>Skin Irritation</b>        | May cause very slight transient reversible skin irritation if unwashed. May cause slight redness and swelling.  |
| <b>Sensitization</b>          | Not expected to cause skin or respiratory sensitization.  |
| <b>Aspiration Hazards</b>     | If swallowed can be aspirated into lungs and cause chemical pneumonia, varying degrees of pulmonary injury or death. If swallowed, do NOT induce vomiting.  |
| <b>Chronic Exposure</b>       |   |
| <b>Target Organ Effects</b>   | No data available to indicate product or components at greater than 1% are chronic health hazards.  |
| <b>Carcinogenicity</b>        | This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.                                  |
| <b>Mutagenicity</b>           | No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.   |
| <b>Reproductive Toxicity</b>  | No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.  |
| <b>Teratogenicity</b>         | No data available to indicate product or any components contained at greater than .1% may cause birth defects.  |

**Analysis – LD50 / LC50**

**Inhalation LC50 Rat**  
**Oral LD50 Rat**  
**Dermal LD50 Rabbit**

4.6-7.64 mg/L (4HR) Aerosolized  
>5000 mg/kg  
>2000 mg/kg

**12. Ecological Information**

**Component Analysis- Ecotoxicity – Aquatic Life**

| Duration/Test/Species                   | Concentration/Conditions |
|---|--------------------------|
| 96 Hr LL50; WAF<br>Aquatic Vertebrates  | 3.2-65 mg/L              |
| 7 Day EL50; WAF<br><i>Daphnia magna</i> | 2.0-210 mg/L             |
| 21 Day EL-50<br><i>Daphnia magna</i>    | >0.5 mg/L                |


|  |                  |
|--|------------------|
| <b>Persistence &amp; Degradability</b> | Readily degraded |
| <b>Bioaccumulation Potential</b>       | Not Available    |
| <b>Soil Mobility</b>                   | Not Available    |
| <b>Other Adverse Effects</b>           | Not Available    |

**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.

**14. Transportation Information**

| Emergency Response Guide No. | 171       |  | <i>North American Emergency Response Guide Book</i> |               |   |
|------------------------------|-----------|--|---|---------------|---|
|                              | UN Number | Shipping Name (technical name)   | Hazard Class  | Packing Group | Placard/ Label  |
| <b>U.S. DOT</b>              |           | Not Regulated  |   |               |   |
| <b>IMDG</b>                  | 3082      | Environmentally Hazardous Substance, Liquid, N.O.S. (Petroleum Distillate) | 9   | III           |  |
| <b>IATA</b>                  | 3082      | Environmentally Hazardous Substance, Liquid, N.O.S. (Petroleum Distillate) | 9   | III           |   |

\*Not regulated if net quantity is <1.3 gallons for liquids

**15. Regulatory Information**

**SARA Extremely Hazardous**

This product does not contain greater than 1% of any “extremely

**15. Regulatory Information**

**Substances (Sections 302 & 304)** 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**

|                          |     |
|--------------------------|-----|
| <b>Acute Hazard</b>      | Yes |
| <b>Chronic Hazard</b>    | No  |
| <b>Fire Hazard</b>       | No  |
| <b>Reactivity Hazard</b> | 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 is not routinely tested to determine chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.

**California Air Resource Board (CARB)** This product is considered a Low Vapor Pressure – Volatile Organic Compound (LVP-VOC) according to the CARB. This product meets one of the following requirements in order to be considered a LVP-VOC:

(A) has a vapor pressure less than 0.1 mm Hg at 20°C, as determined by ARB Method 310; or

(B) is a chemical “compound” with more than 12 carbon atoms, or a chemical “mixture” comprised solely of “compounds” with more than 12 carbon atoms, as verified by formulation data, and the vapor pressure and boiling point are unknown; or

(C) is a chemical “compound” with a boiling point greater than 216°C, as determined by ARB Method 310; or

(D) is the weight percent of a chemical “mixture” that boils above 216°C, as determined by ARB Method 310.

**California Air Resource Board (CARB) Bin Number**

20

**Global Chemical Inventories**

| Inventory   |               |
|-------------|---------------|
| US TSCA     | Present       |
| EU          | Present       |
| Japan       | Not available |
| Australia   | Present       |
| New Zealand | Present       |
| Canada      | Present       |
| Switzerland | Not available |

|             |               |
|-------------|---------------|
| Korea       | Present       |
| Philippines | Not Available |
| China       | Present       |
| Taiwan NECI | Present       |

**16. Other Information**

**US NFPA Ratings**

| Health | Fire | Reactivity |
|--------|------|------------|
| 0      | 1    | 0          |

**HMIS Ratings**

| Health | Fire | Physical Hazards |
|--------|------|------------------|
| 0      | 1    | 0                |

**Revision Date** 10 November 2015  
**Revision Reason** Section 14

*The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.*

**End of SDS**