



## MATERIAL SAFETY DATA SHEET

### Philkool® Soluble Oil

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Synonyms:** Soluble Grinding Oil  
**Formula:** Mixture  
**Chemical Family:** Mixture  
**CAS Number:** Mixture  
**SAP Code:** 1012801; 1012802  
**Product Code:** 80770  
**MSDS Number:** 001992  
**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMIS Ratings:** Health 2, Flammability 1, Reactivity 0  
**Intended Use(s):** Coolant for non-critical machine work

The intended use of this product is indicated above, if any additional use is known please contact us at the Technical Information number listed below.

**Manufactured By:** Phillips 66 Company  
 A Division of Phillips Petroleum Company  
 Bartlesville, Oklahoma 74004

#### Phone Numbers

**Emergency:** (918) 661-8118  
**Technical Information:** (800) 766-0050  
**For Additional MSDSs:** (918) 661-6343

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Specification and CAS #	Weight % In Product*	ACGIH TLV (TWA)	ACGIH Short Term Exposure Limit	ACGIH Ceiling Limits	ACGIH Skin Designation	OSHA Final PEL (TWA)	OSHA - Final PELs - Ceiling Limits	OSHA - Final PELs - Skin Notation
Base stock 64741-88-4	80% to 90%	NE	NE	NE	NE	NE	NE	NE
Proprietary	10% to 20%	NE	NE	NE	NE	NE	NE	NE

\* 1% = 10,000 ppm.

See Section 8 for additional Exposure Limits.

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

Eye Irritant. Skin Irritant. Lung Irritant. Pressure Injection.

### Potential Acute Health Effects

- Eye Contact:** Eye Irritant. May cause severe irritation.
- Skin Contact:** Skin Irritant. May cause severe irritation. Can be absorbed through skin in harmful amounts.
- Inhalation:** Lung Irritant. Irritating to the nose, throat and respiratory tract causing coughing, wheezing and/or shortness of breath. Harmful if inhaled. May be irritating to the eyes and respiratory tract. Overexposure by inhalation of hot or misted material may cause nonspecific discomfort, such as irritation to eyes, nose, throat or nausea, headache or weakness. Caution should be taken to prevent aerosolization or misting of this product without proper respiratory protection.
- Ingestion:** Slightly toxic (LD50 > 5 gm/kg).
- Aggravated Medical Conditions:** Skin Disorders.

## 4. FIRST AID MEASURES

- Eye Contact:** Immediately flush eyes with running water for at least 15 minutes. If irritation or adverse symptoms develop, seek medical attention.
- Skin Contact:** Immediately wash skin with soap and water for at least 15 minutes. If irritation or adverse symptoms develop, seek medical attention.
- Inhalation:** Immediately remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.
- Ingestion:** If illness or adverse symptoms develop, seek medical attention.
- Notes To Physician:** For injection injuries, immediate medical treatment is required. Physicians may call the emergency number (918) 661-8118.

## 5. FIRE FIGHTING MEASURES

- Flash Point:** 330F (166C)  
**FP Method:** COC  
**Ignition Temperature:** Unknown

### Flammable Limits (% by Volume in Air)

- Lower Explosive Limit -** Not Established  
**Upper Explosive Limit -** Not Established

**Fire Extinguishing Media:** Carbon Dioxide, Dry Chemicals, Foam

**Fire Fighting Procedures:** Evacuate area and fight fire from a safe distance. Shut off source, if possible. Use NIOSH approved self-contained breathing apparatus and other protective equipment and/or garments described in Section 8 if conditions warrant. Use water spray to cool nearby containers and structures exposed to fire.

**Fire and explosion hazards:** Carbon oxides formed when burned. Various hydrocarbons formed when burned.

## 6. ACCIDENTAL RELEASE MEASURES

Sweep or gather up material and place in proper container for disposal or recovery.

## 7. HANDLING AND STORAGE

DO NOT get in eyes, on skin, or on clothing. DO NOT breathe vapor, mist, fume or dust. Wash thoroughly after handling. Immediately remove and launder contaminated clothing before reuse. Use only with adequate ventilation. Wear protective equipment and/or garments described in Section 8 if exposure conditions warrant. Store in closed container. Store in well-ventilated area.

If pressure injected under the skin, can cause gangrene if not treated.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye Protection:** Use chemical goggles. If splash hazards are present use chemical goggles and a face shield.

**Respiratory Protection:** For concentrations exceeding an applicable exposure limit, use NIOSH approved air purifying respirator equipped with:  
 - P95 filters, for particulate with time weighted average exposure limit not less than 0.05 mg/M3.

Air purifying respirators should NOT be used in:

- Situations that exceed the maximum use concentrations of the respirator or air-purifying element established by regulatory standards.
- Atmospheres containing less than 19.5 percent oxygen.
- Atmospheres immediately dangerous to life or health (IDLH)

When entering or exiting from areas where the exposure concentration is unknown or if conditions immediately dangerous to life or health (IDLH) exist, use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode.

**Skin Protection:** Use gloves resistant to the material(s) contained in this product. (Nitrile or Neoprene)

**Ventilation:** Use adequate ventilation to control concentrations below applicable exposure limits.

**Other Personal Protection:** Personal protection information shown in Section 8 is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

**Exposure Limits:** OSHA PEL and ACGIH TLV for oil mists is 5 mg/m3.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid
<b>Appearance:</b>	Colorless to dark
<b>Odor:</b>	Mild
<b>Odor Threshold (ppm):</b>	Unknown
<b>Boiling Point:</b>	> 700F (> 371C)
<b>Melting/Freeze Point:</b>	Not Established
<b>Vapor Pressure:</b>	<1 mm Hg @ 68F (20C)
<b>Vapor Density (Air=1):</b>	Not Established
<b>Specific Gravity @ 20 C (Water=1):</b>	0.93 @ 60/60F (16/16/C)
<b>Percent Volatile by Volume:</b>	Negligible
<b>Evaporation Rate (Butyl Acetate=1):</b>	Negligible

**Water Solubility:** Complete  
**Viscosity:** 225 SUS @ 100F (38C)

## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Hazardous Polymerization:** Will Not Occur  
**Incompatibility (Materials to Avoid):** Oxygen and strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon oxides and various hydrocarbons are formed when burned.

## 11. TOXICOLOGICAL INFORMATION

### Subchronic and Chronic Effects:

Prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as lung inflammation. This condition usually causes no symptoms.

### Other Health Effects:

Pressurized injection of product under the skin can lead to seriously inflamed tissue. If left untreated injury can become gangrenous.

Continuous skin contact with used motor oils has caused skin cancer in laboratory animals. Avoid prolonged skin contact with used motor oil.

These products may contain petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Acute Data:

No data available.

## 12. ECOLOGICAL INFORMATION

**Freshwater Fish Toxicity:** The acute LC50 for freshwater fish is 10-100 ppm, based on component data.

**Saltwater Invertebrates Toxicity:** The acute LC50 for saltwater invertebrates is 10-100 ppm, based on component data.

**Bioaccumulation:** Less than 0.1% of the components potentially bioconcentrate, based on octanol/water coefficients. 25% or great of the components display no potential to bioconcentrate.

## 13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**Ground Transportation**  
**DOT Shipping Description:** Not Regulated

## 15. REGULATORY INFORMATION

**Base stock** 80% to 90% **64741-88-4**  
**Regulated Substance on TSCA Inventory:** Listed  
**Canada - Domestic Substances List:** Listed

**Additional Information:**

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

**EPA SARA 311/312 (Title III Hazard Categories)**

<b>Acute Health:</b>	Yes
<b>Chronic Health:</b>	Yes
<b>Fire Hazard:</b>	No
<b>Pressure Hazard:</b>	No
<b>Reactivity Hazard:</b>	No

## 16. OTHER INFORMATION

**Revision Summary:**

This Material Safety Data Sheet (MSDS) has been revised to conform with the American National Standards Institute (ANSI) 16 Section Format.

<b>Preparer:</b>	Health, Environment and Safety Department
<b>Date Prepared:</b>	01/11/2002
<b>Supersedes:</b>	01/30/1998

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