



# MATERIAL SAFETY DATA SHEET

## Penreco® Drakeol® Mineral Oil - USP Grades

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Penreco® Drakeol® Mineral Oil - USP Grades

**Synonyms:** Penreco® Drakeol® 19  
 Penreco® Drakeol® 21  
 Penreco® Drakeol® 25  
 Penreco® Drakeol® 32  
 Penreco® Drakeol® 33  
 Penreco® Drakeol® 34  
 Penreco® Drakeol® 35  
 Penreco® Drakeol® 350  
 Penreco® Drakeol® 35G  
 Penreco® Drakeol® 400

**Chemical Family:** Petroleum Hydrocarbon

**Responsible Party:** Penreco  
 138 Petrolia Street  
 Karns City, PA 16041-9799

**For Additional MSDSs** 1-800-762-0942

**Technical Information:** 1-800-245-3952

### EMERGENCY OVERVIEW

**24 Hour Emergency Telephone Numbers:**

Spill, Leak, Fire or Accident

California Poison Control System: (800) 356-3129

Call CHEMTREC

North America: (800)424-9300

Others: (703)527-3887 (collect)

**Health Hazards/Precautionary Measures:** None Anticipated

**Physical Hazards/Precautionary Measures:** Keep away from all sources of ignition.

**Appearance:** Transparent, water-white

**Physical form:** Liquid

**Odor:** Odorless

**NFPA Hazard Class:**

Health: 0 (Least)

Flammability: 1 (Slight)

Reactivity: 0 (Least)

**HMIS Hazard Class**

Health: 0 (Least)

Flammability: 1 (Slight)

Physical Hazard: 0 (Least)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous components identified per 29 CFR 1910.1200.

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**OTHER COMPONENTS**

**% WEIGHT**

**EXPOSURE GUIDELINE**

**Limits**

**Agency**

**Type**

White Mineral Oil  
CAS# 8042-47-5

100

(See: Oil Mist, If Generated)

**REFERENCE****EXPOSURE GUIDELINE**

	<b><u>Limits</u></b>	<b><u>Agency</u></b>	<b><u>Type</u></b>
Oil Mist, If Generated	5 mg/m <sup>3</sup>	ACGIH	TWA
CAS# None	10 mg/m <sup>3</sup>	ACGIH	STEL
	5 mg/m <sup>3</sup>	OSHA	TWA
	2500 mg/m <sup>3</sup>	NIOSH	IDLH
	5 mg/m <sup>3</sup>	NOHSC	TWA

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

All components are listed on the TSCA inventory.

**3. HAZARDS IDENTIFICATION****Potential Health Effects:**

**Eye:** Not known to be an eye irritant.

**Skin:** Not known to be a skin irritant. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** No harmful effects reported.

**Ingestion (Swallowing):** No harmful effects reported from ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract and diarrhea.

**Cancer:** No evidence of cancer has been demonstrated in several well conducted animal studies.

**Target Organs:** No data available for this material.

**Developmental:** No data available for this material.

**Pre-Existing Medical Conditions:** None Known

**4. FIRST AID MEASURES**

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** First aid is not normally required. However, it is good practice to wash any chemical from the skin.

**Inhalation (Breathing):** First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air. Seek immediate medical attention.

**Ingestion (Swallowing):** First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

**Note To Physicians:** Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flash Point: >370°F/>187.8°C ASTM D-92(COC)  
OSHA Flammability Class: Not applicable  
LEL/UEL%: No Data  
Autoignition Temperature: No Data

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

## 7. HANDLING AND STORAGE

**Handling:** Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and

cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1 and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required.

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used in conjunction with an organic vapor cartridge under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** Not required based on the hazards of the material. However, it is considered good practice to wear gloves when handling chemicals.

**Eye/Face:** While contact with this material is not expected to cause irritation, the use of approved eye protection to safeguard against potential eye contact is considered good practice.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Appearance: Transparent, water-white

Physical State: Liquid

Odor: Odorless

pH: No Data

Vapor Pressure (mm Hg): <1

Vapor Density (air=1): >1

Boiling Point/Range: 590°F / 310°C (approximate)

Freezing/Melting Point: No Data

Solubility in Water: Insoluble

Specific Gravity: 0.86-0.88

Evaporation Rate (nBuAc=1): <1

Bulk Density: 7.17 lbs/gal

Flash Point: >370°F / >187.8°C ASTM D-92(COC)

Flammable/Explosive Limits (%): No Data

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions To Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidizing agents.

**Hazardous Decomposition Products:** carbon, nitrogen and sulfur oxides.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

No definitive information available on carcinogenicity, mutagenicity, target organs or developmental toxicity.

## 12. ECOLOGICAL INFORMATION

Not evaluated at this time

## 13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

## 14. TRANSPORT INFORMATION

**DOT Shipping Description:** Not hazardous

**Note:** Material is unregulated unless in container of 3500 gal or more then provisions of 49 CFR Part 130 apply for land shipment.

IMDG: Not regulated

IATA: Not regulated

## 15. REGULATORY INFORMATION

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

**Acute Health:** No  
**Chronic Health:** No  
**Fire Hazard:** No  
**Pressure Hazard:** No  
**Reactive Hazard:** No

**SARA 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

--None--

**California Proposition 65:**

**Warning:** This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

--None Known--

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

**EPA (CERCLA) Reportable Quantity:**

--None--

**Canada - Domestic Substances List:** Listed

**WHMIS Class:**

Not regulated

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

This material is listed on the following inventories:

Australian (AICS)  
Canadian (DSL)  
Chinese  
European EC/EINECS  
Japanese ENCS  
Korean (ECL)  
Philippine (PICCS)

## 16. OTHER INFORMATION

**Issue Date:** 04/09/03

**Previous Issue Date:** 07/26/01

**Revised Sections:** New Format

**MSDS Number:** 776507

**Status:** Final

**Disclaimer of Expressed and Implied Warranties:**

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