

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

Page 1 of 9

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467
Generic Name: Grease
Chemical Family: Petroleum hydrocarbon
Responsible Party: 76 Products Company
Union Oil Company of California
555 Anton Blvd.
Costa Mesa, California
92626

For further information contact Help Desk
8am - 4pm Pacific Time, Mon-Fri: 1-800-762-0942

EMERGENCY OVERVIEW**24 Hour Emergency Telephone Numbers:**

For Chemical Emergencies:
Spill, Leak, Fire or Accident
Call CHEMTREC
North America: (800) 424-9300
Others: (703) 527-3887 (collect)

For Health Emergencies:
Los Angeles Poison
Control Center
Cont. US: (800) 356-3129
Outside US: (213) 222-3212

Health Hazards: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Physical Hazards: This material may burn, but will not ignite readily. Keep away from all sources of ignition.

- ▶ Physical Form: Semi-solid
- ▶ Appearance: Greenish-black
- ▶ Odor: Characteristic petroleum

NEPA HAZARD CLASS: Health: 1 (Slight)
Flammability: 1 (Slight)
Reactivity: 0 (Least)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Issue Date: 01/10/97
Revised Sections: 3, 5, 6, 7, 8, 9, 12

Status: Final Revised

UNOCAL

Product Name: Unocal Unoba Moly HD Grease 2
 Product Code: 05467

Page 2 of 9

HAZARDOUS COMPONENTS	% Weight	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Vacuum Tower Bottoms CAS# 64741-56-6	0-5	(See: Asphalt (Petroleum) Fumes)		
Graphite (Natural) CAS# 7782-42-5	0-3	2 mg/m3	ACGIH	TWA-Resp.
		2.5 mg/m3	OSHA	TWA-Resp.
		2.5 mg/m3	Cal.OSHA	TWA-Resp.
Insoluble Molybdenum Compound CAS# Proprietary	0-3	(See: Molybdenum, Insoluble Compounds (as Mo))		
Asphalt (Petroleum) Fumes CAS# 8052-42-4		5 mg/m3	ACGIH	TWA
		5 mg/m3	MSHA	TWA
		5 mg/m3	Cal.OSHA	TWA
Molybdenum, Insoluble Compounds (as Mo) CAS# None		10 mg/m3	ACGIH	TWA
		10 mg/m3	OSHA	TWA
		10 mg/m3	MSHA	TWA
		10 mg/m3	Cal.OSHA	TWA
Oil Mist, If Generated CAS# None		5 mg/m3	ACGIH	TWA
		10 mg/m3	ACGIH	STEL
		5 mg/m3	OSHA	TWA
		5 mg/m3	MSHA	TWA
		5 mg/m3	Cal.OSHA	TWA
OTHER COMPONENTS	% Weight	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Spent Lube Oil, Hydrotreated CAS# 64742-58-1	30-50	(See: Oil Mist, If Generated)		
Hydrotreated Distillate, Heavy Naphthenic CAS# 64742-52-5	10-30	(See: Oil Mist, If Generated)		
Solvent Dewaxed Residual Oil CAS# 64742-62-7	10-30	(See: Oil Mist, If Generated)		
Extract Residuum Resin CAS# 64742-16-1	5-20	Not Established		

Issue Date: 01/10/97

Status: Final Revised

Revised Sections: 3, 5, 6, 7, 8, 9, 12

UNOCAL

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

Page 3 of 9

Additives 7-16 Not Established
CAS# Proprietary

Note: OSHA exposure limits adopted in 1989 were vacated by the U.S. Court of Appeals. OSHA PEL's listed above (if any) may be included in those that were overturned, but are provided as guidance. Enforceable limits may be less stringent or not yet established.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: No skin irritation information available. Contact may cause mild skin irritation including redness, burning, and drying and cracking of the skin. No information available on skin absorption. Studies of other exposure routes suggest a low degree of hazard by skin absorption.

Inhalation (Breathing): No data available. However, inhalation is not an expected route of exposure.

Ingestion (Swallowing): No harmful effects expected.

Signs and Symptoms: Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, hyperactivity and signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, and fatigue).

Cancer: A component is a possible human cancer hazard (see Section 11).

Target Organs: A component is a potential hazard to the lungs (see Section 11).

Developmental: No data available.

Other Comments: High-pressure grease-gun injury may cause serious delayed soft tissue injury.

Chronic lung irritation (pneumoconiosis) due to deposition of dust particles in the lungs, has been reported among workers exposed to graphite-containing dusts. Generation of graphite dusts is not expected from normal intended use of this product.

Issue Date: 01/10/97

Status: Final Revised

Revised Sections: 3, 5, 6, 7, 8, 9, 12

UNOCAL

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

Page 4 of 9

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders and respiratory (asthma-like) disorders.

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: Wipe material from skin, remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops, seek medical attention.

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: High-pressure grease-gun injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. Often these injuries require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flash Point: 439°F/226°C (COC)
OSHA Flammability Class: Not applicable
LEL/UEL: No Data
Autoignition Temperature: No Data
Burn Rate (solids): No Data

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily.

Extinguishing Media: Dry chemical, foam, water, sand, or earth is

Issue Date: 01/10/97

Status: Final Revised

Revised Sections: 3, 5, 6, 7, 8, 9, 12

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

recommended.

Fire Fighting Instructions: Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage (29CFR 1910.156). In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate danger area, keep unauthorized personnel out. Contain spill if it can be done with minimal risk. Move undamaged containers from danger area if it can be done with minimal risk. Cool equipment exposed to fire with water, if it can be done with minimal risk.

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. Isolate danger area and keep unauthorized personnel out. Contain spill 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 treatment drainage systems, and natural waterways. Notify fire authorities and appropriate federal, state, and local agencies. Cleanup under expert supervision is advised. Minimize dust generation. Sweep up and package appropriately for disposal. 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: The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

"Empty" containers retain residue (liquid and/or vapor) 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

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

regulations. Before working on or in tanks which contain or have contained this material, refer to Occupational Safety and Health Administration Regulations, ANSI Z49.1 and other governmental and industrial 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 ventilation or exhaust systems may be required.

Personal Protective Equipment (PPE):

Respiratory: Inhalation is not an expected route of exposure. However, a NIOSH/MSHA approved air purifying respirator with a dust/mist filter may be used 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 positive pressure air supplied respirator if there is potential for 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 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin: The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation, and absorption.

Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

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.

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Flash Point: 439°F / 226°C (COC)
Flammable/Explosive Limits (%): No Data
Autoignition Temperature: No Data
Burn Rate (solids only): No Data
Appearance: Greenish-black
Physical State: Semi-solid
Odor: Characteristic petroleum
Vapor Pressure (mm Hg): No Data
Vapor Density (air=1): >1
Boiling Point: >600°F / >316°C
Freezing/Melting Point: No Data
Solubility in Water: Negligible
Specific Gravity: 0.88
Percent Volatile: Negligible
Evaporation Rate (nBuAc=1): <1
Bulk Density: 7.30 lb/gal

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of storage and handling.

Conditions To Avoid: Extended exposure to high temperatures can cause decomposition.

Incompatible Materials: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Combustion can yield major amounts of oxides of carbon and minor amounts of oxides of sulfur and nitrogen.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Hydrotreated Distillate, Heavy Naphthenic (CAS# 64742-52-5)

Target Organ(s): Administration of certain mineral hydrocarbon

UNOCAL

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

Page 8 of 9

white oils in the diet to Fischer 344 rats at 1500 mg/kg/day for 90 days resulted in the formation of microgranulomas in the liver. However, this response was not observed in studies conducted with other rat strains or dogs. Microgranulomas like those observed in the Fischer 344 rat studies have not been observed in humans.

Vacuum Tower Bottoms (CAS# 64741-56-6)

Carcinogenicity: Application to mouse skin of petroleum hydrocarbons of similar composition and boiling range resulted in an increased incidence of skin tumors. This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

12. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" or "characteristic" hazardous waste. Use which results in chemical or physical change or contamination may subject it to hazardous waste regulations. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

13. TRANSPORT INFORMATION

Hazard Class or Division: Not classified as hazardous

14. REGULATORY INFORMATION

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

--None--

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):

COMPONENT

Various Polycyclic Aromatic
Hydrocarbons

EFFECT

Skin Cancer

Issue Date: 01/10/97

Status: Final Revised

Revised Sections: 3, 5, 6, 7, 8, 9, 12

UNOCAL

Product Name: Unocal Unoba Moly HD Grease 2
Product Code: 05467

Page 9 of 9

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

EPA (CERCLA) Reportable Quantity: --None--

15. DOCUMENTARY INFORMATION

Issue Date: 01/10/97
Previous Issue Date: 08/13/96
Product Code: 05467
Previous Product Code: 05467

16. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information in this document is believed to be correct as of the date issued. **HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.** This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

Issue Date: 01/10/97
Revised Sections: 3, 5, 6, 7, 8, 9, 12

Status: Final Revised