

MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET - Complies with ANSI Z400.1 Draft Standard for the Preparation of Material Safety Data Sheets, Copyright 1991, Chemical Manufacturers Association. May be used to comply with U.S. Department of Labor OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standards must be consulted for specific requirements.

Date : 02/13/2002

Unocal '76' Guardol 15W/40 Motor Oil

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Unocal Guardol 15W/40

GENERIC NAME: Crankcase Oil

COMPANY IDENTIFICATION

Unocal Refining & Marketing Division
1201 West 5th Street
Los Angeles, CA 90017

CHEMICAL FAMILY: Petroleum Hydrocarbon

EMERGENCY / TECHNICAL NUMBERS

(213) 977-7589

CHEMTREC:

(800) 424-9300 (continental U.S.)

(202) 483-7616 (collect in Hawaii & Alaska)

PRODUCT INFORMATION: MSDS Requests and Product Information: (213) 977-7589

SPECIAL NOTES:

2. COMPOSITION / INFORMATION INGREDIENTS

<u>COMPONENTS</u>	<u>CAS No.</u>	<u>OSHA Exposure Limits (PEL)</u>	<u>ACGIH Recommended Limits (TLV)</u>	<u>Percent by Weight</u>
Oil Mist (if generated)	8012-95-1	5 mg/m ³	5 mg/m ³	n/a
Proprietary Zinc Compound	Proprietary	n/a	n/a	1.000-2.000
Hydrotreated Distillate, Heavy Paraffin	64742-54-7	5 mg/m ³	5 mg/m ³	0.0-86.000
Solvent Dewaxed Distillate, Heavy Paraffin	64742-65-0	5 mg/m ³	5 mg/m ³	0.0-86.000
Solvent Refined Distillate, Heavy Paraffin	64742-65-0	5 mg/m ³	5 mg/m ³	0.0-3.000
Trade Secret	Proprietary	n/a	n/a	9.000-13.000

COMPOSITION COMMENTS:

None.

3. HAZARDS IDENTIFICATION

PRECAUTIONARY WARNING: Used motor oil is a possible skin cancer hazard based on animal data. Liquid or vapor may ignite. Keep away from all sources of ignition. **DO NOT** pressurize, cut, weld, braze, solder, grind, or drill on or near container. "Empty" container retains residue (liquid and/or vapor) and may explode in the heat of a fire.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE OF ENTRY: Nasal or oral

EYE: This material may cause mild eye irritation. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing or redness.

SKIN: This material may cause mild skin irritation. Prolonged or repeated contact or exposure to vapors or mists may cause redness and burning, and drying and cracking of the skin. No harmful effects are expected from skin absorption of this material. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INGESTION: While this material has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract.

INHALATION: While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause irritation of the nose and throat.

CHRONIC EFFECTS: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

OTHER NOTES: It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

4. FIRST AID MEASURES

SIGNS AND SYMPTOMS OF EXPOSURE

EYE: Irritation, redness, watering

SKIN: Mild irritation, redness

INGESTION: Irritation to the digestive tract

INHALATION: Irritation to nose and/or throat

FIRST AID PROCEDURES In an emergency, have physician call Los Angeles Poison Control Center (24 hrs.) 1-800-356-3129

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 and remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

INGESTION: No first aid is normally required; however, if swallowed, and symptoms develop, seek medical attention.

INHALATION: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Flammable

FLASH POINT / METHOD USED: 419 °F (215 °C)

AUTOIGNITION: N/A

FLAMMABILITY LIMITS (% by volume in air): LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide (CO₂), halon, foam or water spray is recommended

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS: This material will burn although it is not easily ignited.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: This material may burn, but will not ignite readily. If container is not properly cooled, it may explode in the heat of a fire. Vapors are heavier than air and may accumulate in low areas.

SPECIAL FIRE FIGHTING PROCEDURES: Wear appropriate protective equipment including respiratory protection as conditions warrant. Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

COMBUSTION PRODUCTS: Combustion may yield major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS: May ignite. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Isolate hazard area and limit entry to authorized personnel. Stop spill/release if it can be done without risk. Wear appropriate protective including respiratory protection as conditions warrant (see Section 3). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment 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 U.S. navigable waters, the Contiguous Zone, or adjoining shorelines, notify the National Response Center (1-800-424-8802). For highway or railway spills, contact CHEMTREC (1-800-424-9300 ConUS, or 1-202-483-7616 collect in Alaska & Hawaii).

CLEANUP MEASURES: Immediate cleanup of any spill is recommended. Spilled material may be absorbed into an appropriate absorbent material. Dispose of product in accordance with local, county, state, and federal regulations.

7. HANDLING AND STORAGE

NORMAL STORAGE: Use and store this material in cool, dry, well ventilated areas away from heat and all sources of ignition. Keep container(s) closed. Store only in approved containers. Keep away from any incompatible materials (see Section 10). Protect container(s) against physical damage. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276. The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2, 3, & 4).

HANDLING: 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 can be dangerous. Do not pressurized, 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 other 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 product, 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.

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. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

RESPIRATORY PROTECTION: The use of respiratory protection is advised when concentrations exceed the established exposure limits (see Section 2). Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (NIOSH approved, if available) or supplied air equipment.

EYE AND FACE PROTECTION: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

SKIN AND HAND PROTECTION: The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation. Impervious clothing should be worn as needed. It is recommended that a source of clean water be available in the work area for flushing eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Clear brown liquid

ODOR: Characteristic petroleum

VAPOR PRESSURE (mm Hg): Not determined

BOILING POINT: >555°F / 291°C

VISCOSITY: 109 cSt @ 40°C

SPECIFIC GRAVITY (H₂O = 1): 0.89 @ 15°C

FLASH POINT: 419°F / 215°C

VAPOR DENSITY (AIR = 1): >1

EVAPORATION RATE (BUTYL ACETATE = 1): <1

SOLUBILITY: Negligible

% VOLATILE: Negligible

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Extended exposure to high temperatures may cause decomposition.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may yield major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

IARC MONOGRAPHS: NDA

TERATOGENIC: NDA

NTP: NDA

OSHA REGULATED: NDA

MUTAGENIC: NDA

12. ECOLOGICAL INFORMATION

No Data Available.

13. DISPOSAL CONSIDERATIONS

Material may be absorbed into an appropriate absorbent material. Dispose of in accordance with all local, county, state, and federal regulations. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, 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 other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

14. TRANSPORTATION INFORMATION

NAME OF CONTENTS: N/A

CONSTITUENTS: No hazardous substances at regulated levels

UN/NA NUMBER: NDA

EMERGENCY RESPONSE NUMBER: (800) 424-9300 ConUS or (202) 483-7616 collect in Hawaii & Alaska.

REPORTABLE QUANTITY: NDA

HAZARD CLASS: Not regulated.

POISON INHALATION HAZARD: NDA

15. REGULATORY INFORMATION

This product contains a proprietary zinc compound, which is subject to the reporting requirements of SARA 313 and 40 CFR 372.

Originally prepared by: Unocal Refining & Marketing Division, MSDS Coordinator, 7 May 1991.

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.