

# Multipurpose R&O (All Grades)

## Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Multipurpose R&O (All Grades)

**MSDS Number:** 778978

**Synonyms:** Multipurpose R&O 22  
Multipurpose R&O 32  
Multipurpose R&O 46  
Multipurpose R&O 68  
Multipurpose R&O 100  
Multipurpose R&O 150  
Multipurpose R&O 220  
Multipurpose R&O 320  
Multipurpose R&O 460

**Intended Use:** Circulating Oil

**Manufacturer/Supplier:** ConocoPhillips Lubricants  
600 N. Dairy Ashford  
Houston, Texas 77079-1175

**Emergency Health and Safety Number:** Chemtrec: 800-424-9300 (24 Hours)

**Customer Service:** 888-766-7676

**Technical Information:** 800-255-9556

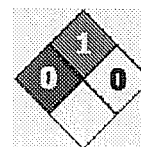
**MSDS Information:** Internet: <http://w3.conocophillips.com/NetMSDS/>

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

This material is not considered hazardous according to OSHA criteria.

#### NFPA



**Appearance:** Clear and bright  
**Physical Form:** Liquid  
**Odor:** Petroleum

#### Potential Health Effects

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

**Skin:** Contact may cause mild skin irritation including redness and a burning sensation. Prolonged or repeated contact can defat the skin, causing drying and cracking of the skin, and possibly dermatitis (inflammation). A component of this material may cause an allergic skin reaction. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No information available on acute toxicity.

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Environmental Precautions:** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

**Methods for Containment and Clean-Up:** Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes.

"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.

**Conditions for safe storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated area 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

Component	US-ACGIH	OSHA	Other
Lubricant Base Oil (Petroleum)	TWA: 5mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> as Oil Mist, if generated	TWA: 5 mg/m <sup>3</sup> as Oil Mist, if generated	---

**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.

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

**Eye/Face Protection:** The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

**Skin/Hand Protection:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile.

**Respiratory Protection:** Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

**Mobility:** Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of base oil components in soil and sediment.

**Persistence and degradability:** The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

**Bioaccumulation Potential:** Log Kow values measured for the hydrocarbon components of this material range from 4 to over 6, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

### 13. DISPOSAL CONSIDERATIONS

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the MSDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle Used Oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

### 14. TRANSPORTATION INFORMATION

**U.S. Department of Transportation (DOT)**

Shipping Description: *Not regulated*  
 Note: *If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil)*

**International Maritime Dangerous Goods (IMDG)**

Shipping Description: *Not regulated*  
 Note: *U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25.*

**International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)**

UN/ID #: *Not regulated*

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	---	---	---
Max. Net Qty. Per Package:	---	---	---

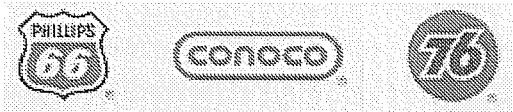
### 15. REGULATORY INFORMATION

**CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):**

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

**CERCLA/SARA - Section 311/312 (Title III Hazard Categories)**

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



# Turbine Oil & Ultra Clean Turbine Oil (All Grades)

## Material Safety Data Sheet

### 1. Product and Company Identification

**Product Name:** Turbine Oil & Ultra Clean Turbine Oil (All Grades)

**MSDS Number:** 778982

**Synonyms:** Turbine Oil 32  
Turbine Oil 46  
Turbine Oil 68  
Turbine Oil 100  
Ultra Clean Turbine Oil 32  
Ultra Clean Turbine Oil 46  
Ultra Clean Turbine Oil 68

**Intended Use:** Turbine Oil

**Manufacturer/Supplier:** ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas 77079-1175

**Emergency Health and Safety Number:** Chemtrec: 800-424-9300 (24 Hours)

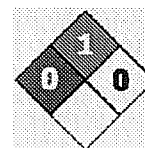
**MSDS Information:** Phone: 800-762-0942  
Email: [MSDS@conocophillips.com](mailto:MSDS@conocophillips.com)  
Internet: <http://w3.conocophillips.com/NetMSDS/>

### 2. Hazards Identification

#### Emergency Overview

This material is not considered hazardous according to OSHA criteria.

#### NFPA



**Appearance:** Clear and bright

**Physical Form:** Liquid

**Odor:** Petroleum

#### Potential Health Effects

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

**Skin:** Contact may cause mild skin irritation including redness and a burning sensation. Prolonged or repeated contact can defat the skin, causing drying and cracking of the skin, and possibly dermatitis (inflammation). A component of this material may cause an allergic skin reaction. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No information available on acute toxicity.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the digestive tract, nausea and diarrhea. Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

**Pre-Existing Medical Conditions:** Conditions which may be aggravated by exposure include skin disorders.

**Environmental Precautions:** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

**Methods for Containment and Clean-Up:** Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents).

## 7. Handling and Storage

**Precautions for safe handling:** Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment. Keep away from flames and hot surfaces.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes.

**Conditions for safe storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated area 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.

"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.

## 8. Exposure Controls / Personal Protection

Component	US-ACGIH	OSHA	Other
Lubricant Base Oil (Petroleum)	TWA: 5mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> as Oil Mist, if generated	TWA: 5 mg/m <sup>3</sup> as Oil Mist, if generated	---

**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.

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

**Eye/Face Protection:** The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

**Skin/Hand Protection:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile.

**Respiratory Protection:** Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

## 9. Physical and Chemical Properties

**Persistence and degradability:** The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

**Bioaccumulation Potential:** Log Kow values measured for the hydrocarbon components of this material range from 4 to over 6, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

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This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle Used Oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

### 14. Transportation Information

#### U.S. Department of Transportation (DOT)

Shipping Description:

*Not regulated*

Note:

*If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil)*

#### International Maritime Dangerous Goods (IMDG)

Shipping Description:

*Not regulated*

Note:

*U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25.*

#### International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

UN/ID #:

*Not regulated*

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	---	---	---
Max. Net Qty. Per Package:	---	---	---

### 15. Regulatory Information

#### CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

#### CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

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

#### CERCLA/SARA - Section 313 and 40 CFR 372:

This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

#### EPA (CERCLA) Reportable Quantity (in pounds):

This material does not contain any chemicals with CERCLA Reportable Quantities.

CONOCOPHILLIPS MKT - LUBES WT  
600 NORTH DAIRY ASHFORD  
2WL 9070B  
HOUSTON TX 77079  
COMMERCIAL LUBRICANTS ANALYST



See other side for important information

Cust./Addr #: 35-0010049067

COAST OIL LLC  
4250 WILLIAMS RD  
SAN JOSE CA 95129