

MATERIAL SAFETY DATA SHEET

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 1 of 10

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: 76 Turbine Oil 100
Product Code: 4624010000
Generic Name: Industrial oil
Chemical Family: Petroleum hydrocarbon
Responsible Party: 76 Lubricants Company
A Division of TOSCO Corporation
72 Cummings Point Road
Stamford, CT
06901

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:
San Francisco Poison
Control Center
Cont. US: (800)356-3129
Outside US: (415)821-5338

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: Liquid
- ▶ Appearance: Clear yellow to brown
- ▶ Odor: Characteristic Petroleum

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Issue Date: 02/02/98
Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised

Product Name: 76 Turbine Oil 100
 Product Code: 4624010000

Page 2 of 10

<u>HAZARDOUS COMPONENTS</u>	<u>% Volume</u>	<u>EXPOSURE GUIDELINE</u>		
		<u>Limits</u>	<u>Agency</u>	<u>Type</u>
Oil Mist, If Generated CAS# None		5 mg/m3 10 mg/m3 5 mg/m3	ACGIH ACGIH OSHA	TWA STEL TWA
<u>OTHER COMPONENTS</u>	<u>% Volume</u>	<u>EXPOSURE GUIDELINE</u>		
		<u>Limits</u>	<u>Agency</u>	<u>Type</u>
Hydrotreated Distillate, Heavy Paraffin CAS# 64742-54-7	0-99	(See: Oil Mist, If Generated)		
Lubricating Oils (Petroleum), Hydrotreated High- Viscosity, Neutral Oil- Based CAS# 72623-85-9	0-99	(See: Oil Mist, If Generated)		
Lubricating Oils (Petroleum), Hydrotreated Neutral Oil-Based C15-30 CAS# 72623-86-0	0-99	(See: Oil Mist, If Generated)		
Lubricating Oils (Petroleum), Hydrotreated Neutral Oil-Based C20-50 CAS# 72623-87-1	0-99	(See: Oil Mist, If Generated)		
Solvent Dewaxed Distillate, Heavy Paraffin CAS# 64742-65-0	0-99	(See: Oil Mist, If Generated)		
Solvent Refined Distillate, Heavy Paraffin CAS# 64741-88-4	0-72	(See: Oil Mist, If Generated)		
Solvent Dewaxed Residual Oil	0-55	(See: Oil Mist, If Generated)		

Issue Date: 02/02/98
 Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 3 of 10

CAS# 64742-62-7

Solvent Dewaxed 0-45 (See: Oil Mist, If Generated)
Distillate, Light
Paraffin
CAS# 64742-56-9

Solvent Refined 0-28 (See: Oil Mist, If Generated)
Residuum
CAS# 64742-01-4

Hydrotreated Bottoms 0-24 (See: Oil Mist, If Generated)
CAS# 64742-57-0

Additives 0-1.1 Not Established
CAS# Proprietary

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.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

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

Skin: Contact may cause mild skin irritation including redness, burning sensation, and drying and cracking of the skin. No harmful effects from skin absorption are expected.

Inhalation (Breathing): No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

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

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

Cancer: Inadequate data available to evaluate the cancer hazard of this material.

Issue Date: 02/02/98

Status: Final Revised

Revised Sections: 1, 2, 3, 4, 6, 10

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 4 of 10

Target Organs: Inadequate data available for this material.

Developmental: No data available.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin 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 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.

Inhalation (Breathing): 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, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. 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: 430°F/221°C (COC)
OSHA Flammability Class: Not applicable
LEL/UEL: No Data
Autoignition Temperature: No Data

Issue Date: 02/02/98

Status: Final Revised

Revised Sections: 1, 2, 3, 4, 6, 10

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 5 of 10

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 danger 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 also be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

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

Issue Date: 02/02/98
Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 6 of 10

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).

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 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.

Issue Date: 02/02/98
Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 7 of 10

Personal Protective Equipment (PPE):

Respiratory: 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 and possible irritation (see manufacturers literature for information on permeability).

Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

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.

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: 430°F / 221°C (COC)
Flammable/Explosive Limits (%): No Data
Autoignition Temperature: No Data
Appearance: Clear yellow to brown
Physical State: Liquid
Odor: Characteristic Petroleum
pH: No Data
Vapor Pressure (mm Hg): No Data
Vapor Density (air=1): >1
Boiling Point: >555°F / >291°C
Freezing/Melting Point: No Data

Issue Date: 02/02/98

Status: Final Revised

Revised Sections: 1, 2, 3, 4, 6, 10

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 8 of 10

Solubility in Water: Negligible
Specific Gravity: 0.87-0.89
Percent Volatile: Negligible
Evaporation Rate (nBuAc=1): <1
Viscosity: 99-100 cSt @ 40°C
Bulk Density: 7.50 lbs/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 oxides of carbon, nitrogen and sulfur.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

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

12. DISPOSAL CONSIDERATIONS

This material under most intended uses would become used oil due to contamination by physical or chemical impurities. RECYCLE ALL USED OIL. While being recycled, used oil is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste. Under federal regulations, used oil is a solid waste managed under 40 CFR 279. However, in California, used oil is managed as hazardous waste until tested to show it is not hazardous. Consult state and local regulations regarding the proper handling of used oil. In the case of used oil, the intent to discard it may cause the used oil to be regulated as hazardous waste.

Contents should be completely used and containers emptied prior to discard. Rinsate may be considered a RCRA hazardous waste and must

Issue Date: 02/02/98

Status: Final Revised

Revised Sections: 1, 2, 3, 4, 6, 10

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 9 of 10

be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or a drum reconditioner. To assure proper disposal of small empty containers, consult with state and local regulations and disposal authorities.

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):

--None Known--

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

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

15. DOCUMENTARY INFORMATION

Issue Date: 02/02/98
Previous Issue Date: 10/29/97
Product Code: 4624010000
Previous Product Code: 04624

16. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. **HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY**

Issue Date: 02/02/98
Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised

Product Name: 76 Turbine Oil 100
Product Code: 4624010000

Page 10 of 10

OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, 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. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

Issue Date: 02/02/98
Revised Sections: 1, 2, 3, 4, 6, 10

Status: Final Revised