



MATERIAL SAFETY DATA SHEET

Caliber TDH – Tractor Hydraulic

1. Production Information

In case of Emergency: Canutec: 613-996-6666
Premium Canada: 250-766-2252

Manufacturer: ConocoPhillips
600 N. Dairy Ashford
Houston, TX 77079-1175

Supplier: Premium Canada
214 – 3121 Hill Road
Winfield, BC V4V 1G1

Product Name: Caliber TDH – Tractor Hydraulic
Product Use: Transmission Oil
Chemical Family: Petroleum Hydrocarbon
WHMIS Class: Not regulated

2. Hazardous Ingredients

Hazardous Components	% Volume	Exposure Guideline
Zinc Compound CAS# Proprietary	1 – 2	Not established
Other Components	% Volume	Exposure Guideline
Lubricant Base Oil CAS# Various	86 – 87	(See: Oil Mist, If Generated)
Additives	13 – 14	Not established

Reference:	Exposure Guideline		
	Limits	Agency	Type
Oil Mist, If Generated CAS# None	5 mg/m3	ACGIH	TWA
	10 mg/m3	ACGIH	STEL
	5 mg/m3	OSHA	TWA
	2500 mg/m3	NIOSH	IDLH
	5 mg/m3	NOHSC	TWA

The base oil for this product can be a mixture of any of the following highly refined petroleum steams:
CAS 64741-88-4; CAS 64741-89-5; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1

Note: Provincial, 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 component are listed on the TSCA inventory.

Product code: No Data

3. Physical Data

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

Physical state: Liquid
Appearance: Amber
Odor: Characteristic petroleum
pH: Not applicable
Specific gravity: 0.88
Vapor pressure (mm Hg): <1
Vapor density (air = 1): >1
Boiling point: >271°C
Freezing point: Not data
Solubility in Water: Negligible
Percent Volatile: Negligible
Evaporation Rate (nBuAc=1): <1
Viscosity: 9.8 cSt @ 100°C / 61 cSt @ 40°C
Bulk Density: 7.321 lbs/gal
Flash point: 437°F / 225°C (COC)
Flammable/Explosive Limits: No data

4. Fire or Explosion

Flammable properties: Flash point: 437°F / 225°C (COC)
 OSHA Flammability Class: Not Regulated
 LEL/UEL%: No data
 Auto-ignition 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.

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 7.).
 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.

Extinguishing Media: Dry chemical extinguishing powder, 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.

5. Reactivity Data

- Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- Conditions to avoid:** Extended exposure to high temperatures can cause decomposition.
- Materials to avoid:** Avoid contact with strong oxidizing agents.
- Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen, sulfur, phosphorus and zinc oxides. Hydrogen sulfide and alkyl mercaptans may also be released. Methacrylate monomers may also be formed.
- Hazardous Polymerization:** Will not occur.

6. Toxicological Properties

- 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 worsen irritation by causing drying and cracking of the skin leading to dermatitis (inflammation). No harmful effects from skin absorption are expected.
- Inhalation:** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.
- Ingestion:** No harmful effects expected from ingestion.
- Signs and symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea and diarrhea.
- Cancer:** Inadequate evidence available to evaluate the cancer hazard of this material. See below (Carcinogenicity information)
- Pre-existing medical conditions:** Conditions aggravated by exposure may include skin disorders.
- Carcinogenicity information:** The petroleum base oil contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. None of the oils used are listed as a carcinogen by NTP, IARC or OSHA.
- Environment protection:** Prevent material from entering waterways, drains and sewers

7. Preventative Measures

- Respiratory:** Where concentrations in air may exceed exposure limits and where engineering, work practices or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.
- Skin:** Wear appropriate chemically protective gloves. Wear appropriate clothing to prevent contact with skin. As a minimum longsleeves and trousers should be worn.
- Eyes:** Use of approved eye protection (i.e., safety glassed, goggles and/or face-shield) should be determined based on conditions of use, to safeguard against potential eye contact, irritation or injury.
- Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.
- Leak or spill:**
 Small – 20 Litres or less: soak up with inert oil absorbent, dispose at approved facility.
 Large – 20 Litres or more: contain as soon as possible, remove by best means available and arrange recycling or disposal through approved facility. Notify appropriate authorities immediately.
- Waste disposal:** New or used mineral oil or solvent must not be allowed to enter the ground, ground water, water courses, sewers or drainage systems. Advice may be sought from the local waste disposal authority.
- Storage:** Store tightly closed in a cool, dry, and well ventilated area, out of direct sunlight. Avoid sparks, flames and other ignition sources. Store away from incompatible materials such as material that support combustion (oxidizing materials).

Do not reuse empty containers, return empty drums to supplier or drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with government regulations.

Shipping information: Not classified as dangerous good.

8. First Aid Measures

Swallowed	First aid is not normally required, however, if swallowed and symptoms develop seek medical attention.
Eye:	If contact with eye(s) occur, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If irritation develops and persists seek medical attention.
Skin:	Remove all contaminated clothing. Wash gently and thoroughly with water and non-abrasive soap. Ensure contaminated clothing is washed before re-use or discard. If irritation develops and persists seek medical attention.
Inhaled:	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a facemask if breathing is difficult. If irritation persists seek medical attention.
Note to physicians:	High-pressure hydrocarbon injection 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.
First Aid facilities:	Eye wash station, wash room facilities.

9. Preparation Information

Prepared by: Technical Services Department

Preparation Date: February 10, 2004