

Safety Data Sheet

Issuing Date 07-Dec-2009

Revision Date 07-May-2014

Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product identifier</u> Product name	Transmission Drive Fluids; SAE 10W, 30, 40, 50, 60
Other means of identification Product Code(s) Synonyms	TDF4-10, TDF4-10-640, TDF4-30, TDF4-30-640, TDF4-40, TDF4-40-640, TDF4-50, TDF4-50-640, TDF4-60, TDF4-60-640 No information available
Recommended use of the chemical	
Recommended Use Uses advised against	Caterpillar TO-4 Fluid, Lubricant. No information available
Uses auvised against	
Details of the supplier of the safety Manufacturer Address The Lubri-Loy Company 150 Enterprise Dr. Wentzville, MO 63385 TEL: (636) 561-5007	<u>data sheet</u>
Emergency telephone number	
Company Phone Number Company Emergency Phone	(636) 561-5007
Number	(636) 561-5007
Emergency telephone number	Chemtrec 1-800-424-9300
	2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

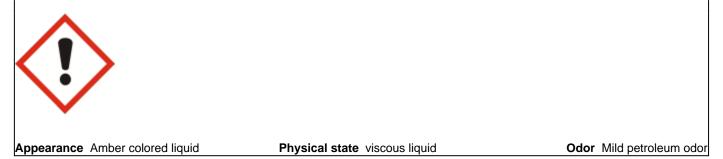
Serious eye damage/eye irritation Category 2A

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Hazards not otherwise classified (HNOC)

Other information

- May be harmful in contact with skin
- Causes mild skin irritation
- · Harmful to aquatic life with long lasting effects
- · Harmful to aquatic life

Unknown Aquatic Toxicty

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name Chemical Family Hydrocarbon Lubricating Fluid. Petroleum hydrocarbon mixture.

Chemical name	CAS-No	Weight %	Trade secret
Petroleum distillates, solvent dewaxed heavy	64742-65-0	0-48	*
paraffinic			
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	0-86	*
Residual Oils (petroleum), solvent-dewaxed	64742-62-7	0-76	*
Calcium long-chain alkylphenate sulfide	Proprietary	1.24-1.86	*
Zinc dialkyl dithiophosphate	68649-42-3	0.62-1.24	*
Phenol, 4-dodecyl-	104-43-8	0.06-0.30	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures				
General advice	No hazards which require special first aid measures.			
Eye contact	Flush eyes for 30 minutes with water. Get medical attention if irritation persists.			
Skin contact	Wash off immediately with soap and plenty of water.			
Inhalation	Move exposed persons to fresh air. Consult medical personal if breathing issues occur.			
Ingestion	Do NOT induce vomiting. Consult a physician.			
Most important symptoms and effects, both acute and delayed				
Symptoms	No information available.			
Indication of any immediate medical attention and special treatment needed				
Notes to Physician	Treat symptomatically.			

5. FIRE-FIGHTING MEASURES

<u>Suitable extinguishing media</u> Carbon dioxide (CO₂). Dry chemical. Foam. Water can be used to keep surrounding materials cool.

Small Fires

Always use personal safety equipment. Follow appropriate personal safety procedures, and extinguishing media.

Large Fires

Contact emergency personnel.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Combustible material.

Hazardous combustion productsCarbon monoxide. Carbon dioxide (CO₂).

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection	Avoid contact with the skin and the eyes. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. Wash skin with soap and water if contact occurs. Launder soiled clothing. If spilled, take caution, as material can cause surfaces to become very slippery.			
Environmental precautions				
Environmental precautions	See Section 12 for additional Ecological Information.			
Methods and material for containm	ent and cleaning up			
Methods for containment	Cover with earth, sand, or other non-combustible material followed with plastic sheets to minimize spreading or contact with rain.			
Methods for cleaning up	Excess liquid material can be collected using a scoop or shovel and stored for recycling or disposal. Prevent material from entering drains or waterways.			
7. HANDLING AND STORAGE				
Precautions for safe handling				
Advice on safe handling	Avoid contact with skin, eyes and clothing. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. If contact is made, wash skin with soap and water. Launder soiled clothing. Maximum handling temperature is 70 degrees C (158 F). It is recommended to pump or transfer material at ambient temperature.			
Conditions for safe storage, includ	ing any incompatibilities			
Storage Conditions	Keep away from heat and sources of ignition. Keep containers closed when not in use. Follow first aid measures if contact occurs, and spill procedures if spill occurs. For packaged material: Store in a cool dry area. For bulk material: store in cool dry area. Always follow local, state, and federal guidlines for storage of material for amount stored.			
Incompatible Products	Strong oxidizing agents.			
8. EXPOSURE CONTROLS/PERSONAL PROTECTION				

Control parameters

Exposure guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.		
Appropriate engineering controls			
Engineering Controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, su	ch as personal protective equipment		
Eye/face Protection	If splashes are likely to occur, wear:. Goggles. Eye/face Protection.		
Skin and body protection	Long sleeved clothing. Protective gloves can be worn, if material comes in contact with skin wash with soap and water.		
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.		
General Hygiene Considerations	Remove and wash contaminated clothing before re-use.		
l l	9. PHYSICAL AND CHEMICAL PROPERTIES		

Information on basic physical and chemical properties

Physical state Appearance Color

Property	<u>Value</u> No int
pH Malting point/fragming point	
Melting point/freezing point	No int
Boiling Point/Range	No int
Flash point	> 93.
Evaporation rate	No in
Flammability (solid, gas)	No in
Flammability Limit in Air	
Upper flammability limit:	No inf
Lower flammability limit:	No int
Vapor pressure	No int
Vapor density	No int
Specific gravity	0.87-0
Water solubility	No int
Solubility in other solvents	No int
Partition coefficient	No int
Autoignition temperature	
Decomposition temperature	No in
Kinematic viscosity	6.5-2
Dynamic viscosity	No in
Explosive properties	No in
Oxidizing properties	No in
Other information	

Softening point VOC Content Density Bulk density viscous liquid Amber colored liquid amber <u>Values</u> No information available

No information available No information available > 93.3 °C / > 200 °F No information available No information available

No information available No information available No information available 0.87-0.89 No information available No information available No information available

No information available 6.5-25.0 @100C mm2/s No information available No information available No information available

No information available No information available No information available No information available Odor threshold

Mild petroleum odor No information available

Remarks • Method

Odor

Cleveland open cup (COC)

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Excessive heat. High energy sources of ignition.

Incompatible materials

Strong oxidizing agents.

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Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact	Avoid contact with eyes. May cause irritation.
Skin contact	May cause eye/skin irritation. Prolonged skin contact may defat the skin and produce dermatitis.
Ingestion	Do NOT taste or swallow.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lubricating oils, petroleum, hydrotreated spent 64742-58-1	> 2000 mg/kg (Rat)	> 4480 mg/kg (Rabbit)	-
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat)4 h
Phenol, 4-dodecyl- 104-43-8	= 2100 mg/kg (Rat)	= 5 mL/kg (Rabbit)	-

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/eye irritation	Irritating to eyes.	
Sensitization	No information available.	
Germ cell mutagenicity	No information available.	
Carcinogenicity	No information available.	

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	-	Group 1	-	Х

Residual Oils (petroleum),	-	Group 1	-	Х
solvent-dewaxed				
64742-62-7				

Reproductive toxicity	No information available.
Developmental toxicity	Contains ingredients that have suspected developmental hazards.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Aquatic Toxicty 0% of the mixture consists of ingredient(s) of unknown toxicity The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.3% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Lubricating oils, petroleum, hydrotreated spent 64742-58-1	-	79.6: 96 h Brachydanio rerio mg/L LC50 semi-static 3.2: 96 h Pimephales promelas mg/L LC50 semi-static	-
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Zinc dialkyl dithiophosphate 68649-42-3	-	1.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static 10.0 - 35.0: 96 h Pimephales promelas mg/L LC50 semi-static	
Phenol, 4-dodecyl- 104-43-8	-	0.14: 96 h Oncorhynchus clarki mg/L LC50	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Waste Disposal Method	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories	
Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zinc dialkyl dithiophosphate	Х	-	Х
68649-42-3			

U.S. EPA Label Information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION				
NFPA_	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Hazards -
HMIS	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X
Issuing Date	07-Dec-2	07-Dec-2009		
Revision Date	07-May-2014			
Revision Note				
(M)SDS sections up	dated 2 3 5 7 9 10 11 16			
Disclaimer				
The information pr	ovided on this SDS is corr	act to the best of our kn	owledge information and	haliaf at the date of ite

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS