

Safety Data Sheet

Issuing Date 23-Mar-2016 Revision Date 23-Mar-2016 Version 1

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

Product identifier

Product name Lubri-Loy DM Hydraulic Fluid AB, ISO 32, 46, 68

Other means of identification

Product Code(s) HFDM-032AB, HFDM-046AB, HFDM-068AB

Synonyms No information available

Recommended use of the chemical and restrictions on use
Recommended Use Hydraulic Fluid, Lubricant.

Uses advised against All Other Uses

Details of the supplier of the safety data sheet

Manufacturer Address The Lubri-Loy Company 150 Enterprise Dr. Wentzville, MO 63385 TEL: (636) 561-5007

Emergency telephone number

Company Phone Number (636) 561-5007 **Company Emergency Phone** (636) 561-5007

Number

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)

Label elements

EMERGENCY OVERVIEW

Appearance light yellow Physical state viscous liquid Odor Mild petroleum odor

Hazards not otherwise classified (HNOC)

Other information

- · 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 NameHydrocarbon Lubricating Fluid.Chemical FamilyPetroleum hydrocarbon mixture.

Chemical name	CAS-No	Weight %	Trade secret

Lubricatin	g oils, petroleum, hydrotreated spent	64742-58-1	98.95	*
	2,6-di-tert-butylphenol	128-39-2	0.17-0.25	*
	Toluene	108-88-3	0.003-0.01	*
	Phenol, dodecyl-, branched	121158-58-5	0.0009-0.008	*

^{*}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 Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by

washing with mild soap and water or a waterless hand cleaner. If irritation or redness

develops and persists, seek medical attention.

Inhalation Move exposed persons to fresh air. Consult medical personnel 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

Suitable extinguishing media

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 products Carbon 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.

Other information Small spill: Remove sources of heat or ignition, provide adequate ventilation, contain leak

using absorbent, inert, non-combustible material. Large Spill: Contain spill, transfer to secure containers. In the event of an uncontrolled material release, the user should

determine if release is reportable under applicable laws and regulations.

For emergency responders Clean up area with absorbent material and place in closed containers for disposal.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment 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, including 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.

	Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Γ	Toluene	TWA: 20 ppm	TWA: 200 ppm	IDLH: 500 ppm
	108-88-3		Ceiling: 300 ppm	TWA: 100 ppm
				TWA: 375 mg/m ³
				STEL: 150 ppm
- 1				STEL: 560 mg/m ³

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection If splashes are likely to occur, wear:. Goggles. Eye/face Protection.

Skin and body protectionLong sleeved clothing. Protective gloves can be worn, if material comes in contact with skin

wash with soap and water.

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

Cleveland open cup (COC)

provided in accordance with current local regulations.

General Hygiene Considerations Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateviscous liquidAppearancelight yellowOdorMild petroleum odorColorlight yellowOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available
Melting point/freezing point
Boiling Point/Range No information available
Flash point > 93.3 °C / > 200 °F
Evaporation rate No information available

Flammability (solid, gas)

No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available
No information available

Specific gravity 0.87-0.89

Water solubilityNo information availableSolubility in other solventsNo information availablePartition coefficientNo information available

Autoignition temperature

Decomposition temperature
Kinematic viscosity
Dynamic viscosity
Explosive properties
Oxidizing properties

No information available
29-74 @ 40C mm2/s
No information available
No information available
No information available

Other information

Softening pointNo information availableVOC ContentNo information availableDensityNo information availableBulk densityNo information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Revision Date 30-Mar-2015

Excessive heat. High energy sources of ignition.

Incompatible materials

Strong oxidizing agents.

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. Repeated exposure may cause skin dryness or cracking.

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)	-
2,6-di-tert-butylphenol 128-39-2	> 5000 mg/kg (Rat)	> 10 g/kg (Rabbit)	-
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg(Rabbit)	= 12.5 mg/L (Rat) 4 h
Phenol, dodecyl-, branched 121158-58-5	= 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

Sensitization Germ cell mutagenicity

Carcinogenicity

No information available.

No information available.

Mineral oils are known to cause cancer because of carcinogenic components (e.g. benzene). The mineral oil in this product is highly refined and should not be considered a carcinogen. Used lubricating oil may contain hazardous components which have the potential to cause skin cancer. Continuous long-term contact with used lubricating oils has

caused skin cancer in animal tests. .

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene	-	Group 3	-	-
108-88-3		-		

Reproductive toxicityContains ingredients that are suspected reproductive hazards.

STOT - single exposure
STOT - repeated exposure
Aspiration hazard

No information available.
No information available.
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 .

 ATEmix (oral)
 5058 mg/kg

 ATEmix (dermal)
 5058 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life Harmful to aquatic life with long lasting effects

0.248% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Lubricating oils, petroleum, hydrotreated spent 64742-58-1	-	3.2: 96 h Pimephales promelas mg/L LC50 semi-static 79.6: 96 h Brachydanio rerio mg/L LC50 semi-static	-
2,6-di-tert-butylphenol 128-39-2	-	-	0.45: 48 h Daphnia magna mg/L EC50
Toluene 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 12.6: 96 h Pimephales promelas mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 54: 96 h Oryzias latipes mg/L LC50 static	
Phenol, dodecyl-, branched 121158-58-5	<u>-</u>	0.14: 96 h Oncorhynchus clarki mg/L LC50	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical name	Partition coefficient
Toluene	2.65
108-88-3	

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.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene	waste number U220	Included in waste streams:	-	-
108-88-3		F005, F024, F025, F039,		
		K015, K036, K037, K149,		
		K151		

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene	-	-	Toxic waste	-
108-88-3			waste number F025	
			Waste description:	
			Condensed light ends, spent	

filters and filter aids, and
spent desiccant wastes from
the production of certain
chlorinated aliphatic
hydrocarbons, by free
radical catalyzed processes.
These chlorinated aliphatic
hydrocarbons are those
having carbon chain lengths
ranging from one to and
including five, with varying
amounts and positions of
chlorine substitution.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Toluene 108-88-3	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated

<u>IATA</u> PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR

TRANSPORT UNDER ICAO TI OR IATA DGR

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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values %	
Toluene - 108-88-3	1.0	

SARA 311/312 Hazard Categories

Acute health hazardNoChronic Health HazardNoFire hazardNoSudden release of pressure hazardNoReactive HazardNo

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	Х	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name Hazardous Substances RQs		Extremely Hazardous Substances RQs	RQ
Toluene 108-88-3	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65	
Toluene - 108-88-3	Developmental	
	Female Reproductive	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Toluene	X	X	X
108-88-3			

U.S. EPA Label Information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 0 Flammability 1 Instability 0 Physical and Chemical

Hazards -

HMIS Health hazards 0 Flammability 1 Physical hazards 0 Personal protection X

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Revision Note Initial Release

Disclaimer

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