

Safety Data Sheet

Issuing Date 21-Jun-2010 Revision Date 02-Jun-2014 Version 3

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

Product identifier

Product name Monograde Engine Oils: SAE 10W, 20W, 30, 40, 50

Other means of identification

AEO-10, AEO-10-640, AEO-10-128, AEO-20, AEO-20-640, AEO-30, **Product Code(s)** AEO-30-640, AEO-30-128, AEO-40, AEO-40, AEO-50, AEO-50-640, **Synonyms**

No information available

Recommended use of the chemical and restrictions on use **Recommended Use** Engine oil, Lubricant. Uses advised against No information available

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)

Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes serious eye irritation May cause an allergic skin reaction



Appearance Amber colored liquid

Physical state viscous liquid

Odor Mild petroleum odor

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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Specific treatment (see supplemental first aid instruction on this label)

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

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- MAY BE HARMFUL IF SWALLOWED
- · May be harmful in contact with skin
- · Causes mild skin irritation
- · Toxic to aquatic life with long lasting effects

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
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	0-79.86	*
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	0-87.9	*
Residual Oils (petroleum), solvent-dewaxed	64742-62-7	0-33.67	*
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	84605-29-8	0.66-1.30	*
Benzenesulfonic Acid,mono-C16-24-alkyl derivs., calcium salts	70024-69-0	0.13-0.64	*
Phenol, dodecyl-, branched	121158-58-5	0.01-0.12	*
Toluene	108-88-3	0.002	*

^{*}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.

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Most important symptoms and effects, both acute and delayed

No information available. **Symptoms**

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Notes to Physician

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Foam. Water can be used to keep surrounding materials cool.

Always use personal safety equipment. Follow appropriate personal safety procedures, and **Small Fires**

extinguishing media.

Contact emergency personnel. **Large Fires**

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.

Environmental precautions

See Section 12 for additional Ecological Information. **Environmental precautions**

Methods and material for containment and cleaning up

Cover with earth, sand, or other non-combustible material followed with plastic sheets to Methods for containment

minimize spreading or contact with rain.

Excess liquid material can be collected using a scoop or shovel and stored for recycling or Methods for cleaning up

disposal. Prevent material from entering drains or waterways.

7. HANDLING AND STORAGE

Precautions for safe handling

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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
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
			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 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state viscous liquid Appearance Amber colored liquid

AppearanceAmber colored liquidOdorMild petroleum odorColorOdor thresholdNo information available

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

pH No information available
Melting point/freezing point No information available
Boiling Point/Range No information available

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Flash point No information available > 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

Water solubility negligible

Solubility in other solvents

Partition coefficient

No information available
No information available

Autoignition temperature

Decomposition temperatureNo information availableKinematic viscosityNo information availableDynamic viscosityNo information availableExplosive propertiesNo information availableOxidizing propertiesNo 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

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.

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. Severely irritating to eyes.

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
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	= 2000 mg/kg(Rat)	> 3200 mg/kg (Rabbit)	-
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

Serious eye damage/eye irritation Irritating to eyes.

Sensitization May cause sensitization by skin contact.

Germ cell mutagenicityNo information available.
No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	-	Group 1	-	Х
Residual Oils (petroleum), solvent-dewaxed 64742-62-7	-	Group 1	-	X
Toluene 108-88-3	-	Group 3	-	-

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.

Developmental toxicityContains ingredients that have suspected developmental 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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0.64% 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	-	5000: 96 h Oncorhynchus mykiss	1000: 48 h Daphnia magna mg/L
heavy paraffinic		mg/L LC50	EC50
64742-65-0			

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
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	-	10 - 100: 96 h Pimephales promelas mg/L LC50 static 38: 96 h Pimephales promelas mg/L LC50 100: 96 h Pimephales promelas mg/L LC50 semi-static	0.1 - 1: 48 h Daphnia magna mg/L EC50
Phenol, dodecyl-, branched 121158-58-5	-	0.14: 96 h Oncorhynchus clarki mg/L LC50	-
Toluene 108-88-3	433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static	Daphnia magna mg/L EC50

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	RCRA - P Sories Wastes	RCRA - F Series Wastes	RCRA - K Sarias Wastes

Chemical name	RCRA - Halogenated	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
	Organic Compounds			

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	Toxic; Ignitable
108-88-3	-

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

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:

All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

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

International Inventories

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 hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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	X	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	RQ
		RQs	
Toluene 108-88-3	1000 lb 1 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ 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
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	X	-	X
Toluene 108-88-3	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION				
<u>NFPA</u>	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X

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Revision Date 02-Jun-2014

Issuing Date21-Jun-2010Revision Date02-Jun-2014

Revision Note

(M)SDS sections updated 2 3 5 9 10 11 12 13 14 15 16

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