

Safety Data Sheet

Issuing Date 29-May-2012 Revision Date 03-Mar-2015 Version 3

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

Product identifier

Product name Ashless/Zinc Free AW Hydraulic Oils: ISO 22, 32, 46, 68

Other means of identification HFAW-032ZF, HFAW-032ZF-640, HFAW-046ZF, HFAW-046ZF-640, HFAW-068ZF,

Product Code(s)HFAW-068ZF-640SynonymsNo information available

Recommended use of the chemical and restrictions on use
Recommended Use Hydraulic Fluid, 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
 (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)

Label elements

EMERGENCY OVERVIEW

Appearance Transparent, yellow tinted Physical state viscous liquid Odor Mild petroleum odor

Hazards not otherwise classified (HNOC)

Other information

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name Hydrocarbon Lubricating Fluid.

Chemical name	CAS-No	Weight %	Trade secret
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	0-99.5	*
Petroleum Distillates	Proprietary	0.17-0.26	*

Aryl Amine	Proprietary	0.04-0.09	*
Alkylphosphonate, long-chain alkyl amine	Proprietary	0.04-0.09	*
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	0-30	*
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	0-99	*

^{*}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 persisits.

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

Water spray, dry chemical, foam, or carbon dioxide.

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.

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 product from entering drains.

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 in properly labeled containers. 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, such as personal protective equipment

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

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 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

AppearanceTransparent, yellow tinted fluidOdorMild petroleum odorColorlight yellowOdor thresholdNo information available

Remarks • Method

<u>Property</u> <u>Values</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

Water solubility
Solubility in other solvents
Partition coefficient
No information available
No information available

Autoignition temperature

Decomposition temperatureNo information availableKinematic viscosity22-68 @40C mm2/sDynamic 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.

<u>Incompatible materials</u>
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. 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	> 2000 mg/kg (Rat)	> 4480 mg/kg (Rabbit)	-
64742-58-1			

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	Group 1	-	Х
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	-	Group 1	-	X

Reproductive toxicity
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

0.09% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
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	-	3.2: 96 h Pimephales promelas mg/L LC50 semi-static 79.6: 96 h Brachydanio rerio mg/L LC50 semi-static	-

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

IATA 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 Does not comply **IECSC** Does not comply **KECL 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 hazardNoChronic Health HazardNoFire hazardNoSudden release of pressure hazardNoReactive HazardNo

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

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

SDS sections updated 1 3

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