

**ADVANCED LUBRICATION TECHNOLOGY, INC.**  
**MATERIAL SAFETY DATA BULLETIN**

**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: **LUBRISILK ISO 46 SYNTHETIC HYDRAULIC FLUID**

CATALOG NUMBER: **LSHF**

ALT INC., 3000 SW 42<sup>nd</sup> AVE.

PALM CITY, FL 34990

24 - Hour Emergency CALL (collect): 772.287.8502

Product and MSDS Information: 772.287.8502

**INFOTRAC** 1-800-535-5053 International 1-352-323-3500 (collect)

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAMES AND SYNONYMS: SYNTHETIC ESTERS/ BORON COMPONENTS

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

**3. HAZARDS IDENTIFICATION**

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.

EFFECTS OF OVEREXPOSURE: No significant effects expected. EMERGENCY RESPONSE DATA: Opaque White Liquid. DOT ERG No. - NA.

SEC: 0

**4. FIRST AID MEASURES**

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Wash contact areas with soap and water.

**INHALATION:** Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a physician. If breathing has stopped, use mouth to mouth resuscitation.

**INGESTION:** Not expected to be a problem when ingested. If uncomfortable seek medical assistance.

## **5. FIRE-FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Carbon dioxide, foam, dry chemical and water fog.

**SPECIAL FIRE FIGHTING PROCEDURES:** Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**SPECIAL PROTECTIVE EQUIPMENT:** For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None. Flash Point C (F): 275 (527) (ASTM D-93). Flammable limits - LEL: NE, UEL: NE.

**NFPA HAZARD ID:** Health: 0, Flammability: 1, Reactivity: 0 **HAZARDOUS**  
**DECOMPOSITION PRODUCTS:** Carbon monoxide.

## **6. ACCIDENTAL RELEASE MEASURES**

**NOTIFICATION PROCEDURES:** Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify INFOTRAC (800) 535-5053

**PROCEDURE IF MATERIAL IS RELEASED OR SPILLED:** Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spills from entering storm sewers or drains and contact with soil.

**PERSONAL PRECAUTIONS:** See Section 8

## **7. HANDLING AND STORAGE**

**HANDLING:** No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

**STORAGE:** Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**VENTILATION:** Use in well ventilated area.

**RESPIRATORY PROTECTION:** No special requirements under ordinary conditions-of use and with adequate ventilation.

**EYE PROTECTION:** Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a exposure limit of 5.00 mg/m3 is suggested for oil mist.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below.

APPEARANCE:	Liquid
COLOR:	Opaque White
ODOR:	None
ODOR THRESHOLD-ppm:	NE
pH:	NE
BOILING POINT °C(°F):	>300(572)
MELTING POINT °C(°F):	NA
FLASH POINT °C(°F):	275(527) (ASTM D-93)
FLAMMABILITY:	NE
AUTO FLAMMABILITY:	NE
EXPLOSIVE PROPERTIES:	NA
OXIDIZING PROPERTIES:	NA
VAPOR PRESSURE- mmHg 20° C:	NE
VAPOR DENSITY:	NE
EVAPORATION RATE:	NE
RELATIVE DENSITY, 15/4 °C:	0.92
SOLUBILITY IN WATER:	Negligible
PARTITION COEFFICIENT:	NE
VISCOSITY AT 40° C, cSt:	47.4
VISCOSITY AT 100° C, cSt:	9.4
POUR POINT °C(°F):	-48(-54)
FREEZING POINT °C(°F):	NE
VOLATILE ORGANIC COMPOUND:	NE

NA=NOT APPLICABLE, NE=NOT ESTABLISHED, D=DECOMPOSES  
FOR FURTHER TECHNICAL INFORMATION, CONTACT ALT INC.

## 10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID:

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

## 11. TOXICOLOGICAL DATA

### - - -ACUTE TOXICOLOGY- - -

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the component

INHALATION TOXICITY (RATS): Not established

EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

## 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: This material meets OECD ready biodegradability criteria. Rainbow Trout LL50 (96 hour) >1,056 ppm.

## 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed .hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

## 14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

### 15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, MITI, and DSL.

EU Labeling: EU labeling not required.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product no chemicals reportable under SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>LIST CITATIONS</u>
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\*\*\* NO REPORTABLE INGREDIENTS \*\*\*

- - - REGULATORY LI STS SEARCHED - - -

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA. RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

### 16. OTHER INFORMATION

Precautionary Label Text:

CONTAINS SYNTHETIC BASE STOCK

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container. All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

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USE: SYNTHETIC BASE STOCK

**NOTE:** THIS PRODUCT IS NOT FORMULATED TO CONTAIN PCBS.

<u>INGREDIENT</u>	<u>CAS NUMBER</u>
TRIMETHYLOL PROPANE OLEATE	57675-44-2
OLEIC ACID	67701-06-8

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THIS INFORMATION IS BASED ON PRESENT KNOWLEDGE AND SHOULD BE USED ONLY AS A GUIDE. HOWEVER, THIS SHALL NOT CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES. ADVANCED LUBRICATION TECHNOLOGY, INC. IS NOT HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCTS. MSDS HAS BEEN PREPARED IN ACCORDANCE WITH EU DIRECTIVE 67/548/EEC, 91/155/EEC AND OTHER EU COMMUNITY LEGISLATIONS IN FORCE.

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