# ADVANCED LUBRICATION TECHNOLOGY, INC www.altboron.com

# **Material Safety Data Sheet**

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Advanced Lubicant Additive Package for Combustion Ignition Fuels

Product Numbers: 200130 - 200135

Brand: MotorSilk

Supplier: Advanced Lubrication Technology, Inc.

30852 Agoura Road, Suite 305 AGOURA HILLS, CA 91301

USA

Telephone: +1 888-259-9190 Fax: +1 818-597-2503

Emergency Phone # (For both supplier and International: Collect 1.352.323.3500 manufacturer):

Preparation Information: Advanced Lubrication Technology, Inc.

+1 888-259-9190

#### 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### **OSHA Hazards**

Target Organ Effect, Irritant

### **Target Organs**

Eyes, Skin, Central nervous system (ingestion)

#### **GHS Classification**

Acute toxicity, Oral (Category 5) Skin irritation (Category 2) Eye irritation (Category 2A)

### GHS Label elements, including precautionary statements

Pictogram

Signal word Irritant

Hazard statement(s)

H303 May be harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

**HMIS Classification** 

Health hazard: 1
Chronic Health Hazard: \*
Flammability: 1
Physical hazards: 0

**NFPA** Rating

Health hazard: 1

Fire: 1 Reactivity Hazard: 0

#### **Potential Health Effects**

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Ingestion** May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

There are no component ingrediants with concentrations deemed hazardous pursuant to relevant GHS Classification.

			Within				
		Amount by	GHS/OSHA	Hazard ID			Ingredient
<u>Ingredient Name</u>	CAS No.	<u>Weight</u>	Flamability	<u>Health</u>	Flammability	Reactivity	CC Flash Point
Synthetic Base Oil Mixture	Various	<b>&gt;</b> 10%, <b>&lt;</b> 25%	NO	0/0	1/1	0/0	> 200 Deg C
Triglicerides	N/A	>45%, < 70%	NO	0/0	1/1	0/0	> 225 Deg D
Polyol/Diol Mixture	Various	<b>&gt;</b> 10%, <b>&lt;</b> 25%	NO	1/1	1/1	0/0	>93 Deg C, < 215 deg C
Boric Acid	10043-35-3	<b>&gt;</b> 1%, <b>&lt;</b> 5.5%	NO	1/0	0/0	0/0	NA
Proprietary Additive	Proprietary	> 0.25%, < 0.5%	NO	1/1	2/2	0/0	> 95 Deq C

#### 4. FIRST AID MEASURES

#### General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

#### lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIREFIGHTING MEASURES

# Conditions of flammability

Not flammable or combustible.

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

### 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

### **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas. Hygroscopic.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters: To the best of our knowledge product does not contain chemicals at concentrations where workplace parameters require reporting under this section. Nevertheless, the product is classified under GHS as having Category 5, Oral, Acute Toxicity; Category 2, Skin irritation; and Category 2A, Eye irritation. Therefore persons who have prolonged contact and/or exposure to the product in the workplace should strongly consider the following precautions when in the long term pressence of or when handling the product

## Personal protective equipment

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm Break through time: > 480 min Material tested:Camatril®

Splash protection Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 30 min Material tested:Dermatril®

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form liquid

Colour colourless to very pale yellow

Safety data

pH 6.5 - 7.3 at 118.2 g/l at 25 °C (77 °F)

Melting Melting point/range: -40 °C (-40 °F) - lit.

point/freezing point

Boiling point 197 °C (387 °F) - lit.

Flash point >94 °C (201 °F) - closed cup

Ignition temperature 306 °C (583 °F)

Autoignition no data available

temperature

Lower explosion limit 1.3 %(V)
Upper explosion limit 7.4 %(V)

Vapour pressure 0.06 hPa (0.02 mmHg) at 20 °C (68 °F)

Density 0.849 g/cm3 at 25 °C (77 °F)

Water solubility N/D

Partition coefficient: log Pow: -0.14

n-octanol/water

Relative vapour 4.08

density - (Air = 1.0)

Odour mild

Odour Threshold no data available

Evaporation rate no data available

### 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Avoid moisture.

### Materials to avoid

Strong acids, Strong oxidizing agents, Strong reducing agents

#### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

#### 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

### Oral LD50

LD50 Oral - rat - 3,700 mg/kg

### **Inhalation LC50**

no data available

#### **Dermal LD50**

### Other information on acute toxicity

no data available

#### Skin corrosion/irritation

Skin - rabbit - Skin irritation - 24 h

# Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

# **Teratogenicity**

no data available

# Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

# **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** Causes eye irritation.

# Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Synergistic effects

no data available

#### Additional Information

RTECS: SA0810000

#### 12. ECOLOGICAL INFORMATION

### **Toxicity**

Toxicity to fish LC50 Pimephales promelas (fathead minnow) -10,700 mg/l - 96 h

Toxicity to Daphnia EC50 Daphnia magna (Water flea) - 3,200 mg/l -46 h

and other aquatic invertebrates

### Persistence and degradability

no data available

#### Bioaccumulative potential

no data available

### Mobility in soil

no data available

#### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### Product

Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

#### 15. REGULATORY INFORMATION

**OSHA Hazards:** This product is subject to the requirements of the Hazard Communication Standard 29 CFR 1910.1200; and more specifically therein with regard to identification of toxicity related to the Target Organ Effect, "Irritant" under GHS.

WHIMS (Canada): Class D-2B (TOXIC) Product contains material that may lead to or cause skin and eye irritantion.

**DSCL (EEC):** R36/38 - Irritating to eyes and skin. S36/37/39 Wear suitable protective clothing and eye protection.

#### **SARA 302 Components:**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

#### Pennsylvania Right To Know Component:

To the best of our knowledge, product does not contain chemicals at levels which require reporting under this statute.

#### **New Jersey Right To Know Component:**

To the best of our knowledge, product does not contain chemicals at levels which require reporting under this statute.

#### **Massachusetts Right To Know Components:**

To the best of our knowledge, product does not contain chemicals at levels which require reporting under this statute.

### California Prop. 65 Components

WARNING: This product contains chemicals known to State of California to cause cancer.

Chemical: Propylene Oxide; CAS# 75-56-9; Amount <= 30 ppm.

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#### 16. OTHER INFORMATION

#### **Further information**

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