

# SAFETY DATA SHEET



## Friction Reducer

Version 1.0

Revision Date 06/01/2015

Print Date 06/01/2015

### 1 PRODUCT AND COMPANY IDENTIFICATION

Product name : Friction Reducer  
Product code : HSSFR  
Chemical Name : Ester

#### Manufacturer or supplier's details

Company : Lubrication Specialties, Inc.  
Address : 255 Neal Ave.  
Mount Gilead, Ohio 43338  
Telephone : 1-800-341-6516  
Telefax : 415-946-3554

Emergency telephone : USA: 24 Hour Emergency Response Information CHEMTREC toll free: 1-800-424-9300; direct/international: 1-703-527-3887. CANADA: Quantum Murray (spill response)1-877-378-7745. CANADA: CANUTEC(collect) 1-613-996-6666. EUROPE: 00 32 3575 5555. ASIA PACIFIC - excl. China: +65 6542-9595. CHINA: +86 21 2315 9344. AUSTRALIA: +61 2 9616 5890. SOUTH AFRICA: +32 3 575 55 55. LATAM: 0800 720 8000. 1-613-996-6666. INDIA: +91 22 30948467/8. JAPAN: +65 6542 9595 (24時間 日本語対応無料通話, シンガポール)

#### Recommended use of the chemical and restrictions on use

Recommended use : Lubricant  
Prepared by : Product Safety Department  
419-947-2647

### 2 HAZARDS IDENTIFICATION

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS Label element

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

May irritate eyes.  
May irritate skin.  
May cause irritation of respiratory tract.  
Ingestion may cause irritation to mucous membranes.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Pure substance

#### Hazardous ingredients

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No hazardous ingredients

### 4 FIRST AID MEASURES

- If inhaled : If breathed in, move person into fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
If eye irritation persists, consult a specialist.
- If swallowed : If symptoms persist, call a physician or Poison Control Center immediately.

### 5 FIRE FIGHTING MEASURES

#### Flammable properties

- Flash point : > 258 °C (> 496 °F)  
Method: open cup
- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire.  
Do not allow run-off from fire fighting to enter drains or water courses.
- Specific extinguishing methods : Standard procedure for chemical fires.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

### 6 ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
Sweep up and shovel into suitable containers for disposal.

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### HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.  
Handle in accordance with good industrial hygiene and safety practice.
- Conditions for safe storage : Store in original container.  
Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid : No special restrictions on storage with other products.

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### EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection  
Remarks : For prolonged or repeated contact use protective gloves.
- Eye protection : Safety glasses
- Skin and body protection : impervious clothing
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

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### PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : light yellow
- Odor : mild
- pH : no data available
- Solidification point : -39 °C (-38 °F)
- pour point : -45 °C (-49 °F)
- Boiling point : > 250 °C (> 482 °F)
- Flash point : > 258 °C (> 496 °F) Method: open cup
- Vapor pressure : < 0.1 hPa (20 °C)
- Relative density : 0.94
- Solubility(ies)

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Water solubility : slightly soluble  
Solubility in other solvents : Solvent: miscible with most organic solvents  
Partition coefficient: n-octanol/water : log Pow: estimated > 3  
Thermal decomposition : no data available  
Viscosity  
Viscosity, dynamic : < 500 mPa.s (-18 °C)  
Viscosity, kinematic : 4.3 - 4.6 mm<sup>2</sup>/s (40 °C)

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### STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.  
Conditions to avoid : None known.  
Incompatible materials : Strong oxidizing agents  
Hazardous decomposition products : Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

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### TOXICOLOGICAL INFORMATION

#### Acute toxicity

**Product:**

Acute oral toxicity : LD50 rat: > 5,000 mg/kg  
Remarks: Low acute toxicity.

#### Skin corrosion/irritation

**Product:**

Species: rabbit  
Method: Draize Test  
Remarks: Mild skin irritation

#### Serious eye damage/eye irritation

**Product:**

Species: rabbit  
Method: Draize Test  
Remarks: Mild eye irritation

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**Respiratory or skin sensitization****Product:**

Species: guinea pig

Result: Did not cause sensitization on laboratory animals.

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Further information****Product:**

Remarks: Information given is based on data on the ingredients and the toxicology of similar products.

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**ECOLOGICAL INFORMATION****Ecotoxicity****Product:**Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 48 hNOEC (Daphnia magna (Water flea)): 1,000 mg/l  
Exposure time: 48 hToxicity to algae : ErC50 (Scenedesmus capricornutum (fresh water algae)): > 1,000 mg/l  
Exposure time: 72 hEbC50 (Scenedesmus capricornutum (fresh water algae)): > 1,000 mg/l  
Exposure time: 72 h

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### Persistence and degradability

**Product:**

Biodegradability : Test Type: (OECD 301B)  
Concentration: 28 d  
Biodegradation: 64 - 78 %  
Exposure time: 64 - 78 d

### Bioaccumulative potential

**Product:**

Partition coefficient: n-octanol/water : log Pow: estimated > 3

### Mobility in soil

no data available

### Other adverse effects

no data available

**Product:**

Additional ecological information : Information given is based on data on the ingredients and the ecotoxicology of similar products.

13	<b>DISPOSAL CONSIDERATIONS</b>
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**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.  
Contaminated packaging : Empty remaining contents.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14	<b>TRANSPORT INFORMATION</b>
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### International regulation

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### Domestic regulation

### Special precautions for user

Remarks : Not regulated for transport in accordance with DOT, TDG, IMDG, and IATA regulations.

15	<b>REGULATORY INFORMATION</b>
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- SARA 311/312 Hazards** : Acute Health Hazard
- SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : 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.

### US State Regulations

#### Pennsylvania Right To Know

Ester 11138-60-6 90 - 100 %

#### New Jersey Right To Know

Ester 11138-60-6 90 - 100 %

**California Prop 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### The ingredients of this product are reported in the following inventories:

**TSCA** All chemical substances in this product are listed on the TSCA Inventory.

**REACH** On the inventory, or in compliance with the inventory  
**CH INV** The mixture contains substances listed on the Swiss Inventory  
**DSL** All components of this product are on the Canadian DSL.  
**AICS** On the inventory, or in compliance with the inventory  
**ENCS** On the inventory, or in compliance with the inventory  
**ISHL** On the inventory, or in compliance with the inventory  
**KECI** On the inventory, or in compliance with the inventory  
**PICCS** On the inventory, or in compliance with the inventory  
**IECSC** On the inventory, or in compliance with the inventory

#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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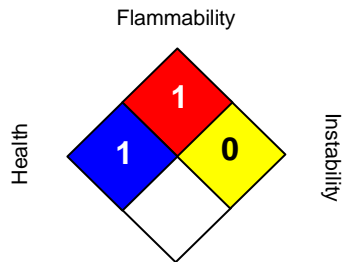
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### Further information

#### NFPA:



#### HMIS II:

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>Reactivity</b>	<b>0</b>

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.