



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## FR3 FRICTION REDUCER

Version number 2.0, Replaces 1.0:

Revision: 2023-09-05

### SECTION 1: Identification

#### 1.1 Product identifier

Trade name

**FR3 FRICTION REDUCER**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

For use as oil additive lubricant. Do not mist.

#### 1.3 Details of the supplier of the safety data sheet

Lubrication Specialties, LLC  
3975 Morrow Meadows Drive  
Mt. Gilead Ohio 43338  
United States  
Telephone: +1 800-341-6516  
Email: lab@lubricationspecialties.com  
Website: hotshotsecret.com

#### 1.4 Emergency telephone number INFOTRrac: 1-800-535-5053

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.4S	skin sensitization	1	Skin Sens. 1	H317
4.1C	hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

Labeling

- Signal word warning

- Pictograms

GHS07, GHS09



- Hazard statements

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H410

Very toxic to aquatic life with long lasting effects.



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### - Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to industrial combustion plant.

### - Hazardous ingredients for labelling

Trade Secret, 1-Octene Homopolymer Hydrogenated, trimethylolpropane tripelargonate, Distillates, hydrotreated heavy paraffinic

### 2.3 Other hazards

of no significance

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
1-Octene Homopolymer Hydrogenated	CAS No 70693-43-5	50 - < 75	Acute Tox. 5 / H313 Acute Tox. 5 / H333	
Trade Secret	CAS No Trade Secret	10 - < 25	Flam. Liq. 3 / H226 Acute Tox. 5 / H303 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412	
trimethylolpropane tripelargonate	CAS No 126-57-8	10 - < 25	Acute Tox. 5 / H303 Acute Tox. 5 / H313 Aquatic Acute 2 / H401 Aquatic Chronic 1 / H410	
Distillates, hydrotreated heavy paraffinic	CAS No 64742-54-7	1 - < 5	Acute Tox. 4 / H332	

For full text of abbreviations: see SECTION 16.



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### SECTION 4: First-aid measures

#### 4.1 Description of first-aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

##### Following skin contact

Wash with plenty of soap and water.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

#### 4.3 Indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

Water jet

#### 5.2 Special hazards arising from the substance or mixture

##### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.



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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

#### 7.3 Specific end use(s)

See section 16 for a general overview.



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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

This information is not available.

#### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	not determined
Odor	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	195.5 °C
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	149 °C at 1 atm
Auto-ignition temperature	245 °C



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Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined

### Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapor pressure	200 Pa at 298 K
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### Density and/or relative density

Density	7.05 lb/gal at 20 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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## 9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
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### Other safety characteristics

Solvent content	100 %
Solid content	0 %
Temperature class (USA, acc. to NEC 500)	T2C (maximum permissible surface temperature on the equipment: 230°C)

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.



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### 10.5 Incompatible materials

Oxidizers

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

##### Acute toxicity

Shall not be classified as acutely toxic.

##### - Acute toxicity estimate (ATE)

Dermal 2,573 mg/kg  
Inhalation: vapor 34.39 mg/l/4h

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
1-Octene Homopolymer Hydrogenated	70693-43-5	dermal	>2,000 mg/kg
1-Octene Homopolymer Hydrogenated	70693-43-5	inhalation: vapor	25 mg/l/4h
1-Octene Homopolymer Hydrogenated	70693-43-5	inhalation: dust/mist	>5 mg/l/4h
Trade Secret	Trade Secret	oral	>2,000 mg/kg
trimethylolpropane tripelargonate	126-57-8	oral	>2,000 mg/kg
trimethylolpropane tripelargonate	126-57-8	dermal	>2,000 mg/kg
Distillates, hydrotreated heavy paraffinic	64742-54-7	inhalation: vapor	11 mg/l/4h
Distillates, hydrotreated heavy paraffinic	64742-54-7	inhalation: dust/mist	2.18 mg/l/4h

##### Skin corrosion/irritation

Causes skin irritation.

##### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

##### Respiratory or skin sensitization

May cause an allergic skin reaction.

##### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

##### Carcinogenicity

Shall not be classified as carcinogenic.



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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans		
Name of substance	Classification	Number
Trade Secret	3	

### Legend

3 Not classifiable as to carcinogenicity in humans

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Trade Secret	Trade Secret	EC50	<0.67 mg/l	fish	8 d
Trade Secret	Trade Secret	LC50	0.41 mg/l	fish	8 d

### 12.2 Persistence and degradability

Degradability of components of the mixture						
Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
Trade Secret	Trade Secret	carbon dioxide generation	58.8 %	14 d		ECHA
Trade Secret	Trade Secret	oxygen depletion	80 %	28 d		ECHA
trimethylolpropane tripelargonate	126-57-8	carbon dioxide generation	75.98 %	28 d		ECHA

### 12.3 Bioaccumulative potential

Data are not available.





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Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Trade Secret	Trade Secret		4.38 (pH value: 7.2, 37 °C)	
trimethylolpropane trielargonate	126-57-8	41.6	>6.2 (25 °C)	

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Endocrine disrupting properties

Information on this property is not available.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

### 14.1 UN number

DOT UN 3082

ICAO-TI UN 3082

### 14.2 UN proper shipping name

DOT Environmentally hazardous substance, liquid, n.o.s.

ICAO-TI Environmentally hazardous substance, liquid, n.o.s.

### 14.3 Transport hazard class(es)

DOT 9

ICAO-TI 9

### 14.4 Packing group

DOT III



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ICAO-TI	III
<b>14.5 Environmental hazards</b>	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	Trade Secret
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	
The cargo is not intended to be carried in bulk.	

### Information for each of the UN Model Regulations



#### **Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information**

Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III
Danger label(s)	9, fish and tree
 	
Environmental hazards	YES (hazardous to the aquatic environment)
Special provisions (SP)	8, 146, 173, 335, IB3, T4, TP1, TP29
ERG No	171

#### **International Maritime Dangerous Goods Code (IMDG) - Additional information**

not assigned

#### **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Environmental hazards	YES (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree
 	
Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

## SECTION 15: Regulatory information

### **15.1 Safety, health and environmental regulations specific for the product in question**

#### **National regulations (United States)**

##### **Superfund Amendment and Reauthorization Act (SARA TITLE III )**

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed



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### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)  
none of the ingredients are listed

### Clean Air Act

none of the ingredients are listed

### Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	Functionality	Authoritative Lists
Trade Secret		EU Fragrance Allergens
Distillates, hydrotreated heavy paraffinic		EC Annex VI CMRs - Cat. 1B

- Hazardous Substances List (MN-ERTK)

none of the ingredients are listed

- Hazardous Substance List (NJ-RTK)

Name of substance	Remarks	Classifications
Trade Secret		F2

#### Legend

F2 Flammable - Second Degree

- Hazardous Substance List (RI-RTK)

none of the ingredients are listed

### California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

#### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	2	temporary or minor injury may occur
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

#### NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).



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Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

### National inventories

Country	Inventory	Status
US	TSCA	not all ingredients are listed

#### Legend

TSCA Toxic Substance Control Act

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ERG No	Emergency Response Guidebook - Number
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer



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Abbr.	Descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical Properties. The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H333	May be harmful if inhaled.
H400	Very toxic to aquatic life.



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Code	Text
H401	Toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.