

Lubricit PE 418-DF

Safety Data Sheet

according to 29 CFR 1910.1200/ HazCom 2012

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lexolube
synthetic esters

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name: Lubricit PE 418-DF
Synonyms: Pentaerythritol Tetraoleate
CAS (EC) No.: 19321-40-5 (242-960-5)

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

Use of the substance/mixture: Lubricant, formulation additive
Uses advised against: None known

1.3 Details of the supplier of the safety data sheet

Zschimmer and Schwarz, Inc.
70 GA Hwy. 22 W
Milledgeville, GA 31061
Phone: (478) 454-1942
Fax: (478) 453-8854

1.4 Emergency telephone number

Emergency number: CHEMTREC: (800) 424-9300

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Substance

Classification according to 29 CFR 1910.1200/ HazCom 2012 (GHS-US)

Not classified per the above regulations

2.2 Label Elements

Labeling according to 29 CFR 1910.1200/ HazCom 2012 (GHS-US)

Hazard pictograms: None
Signal Word: None
Hazard statements: None
Precautionary statements: None

Section 3 – Composition/information on ingredients

3.1 Substance

Chemical nature: Polyol ester

Chemical Name	CAS No. (EC No.)	Concentration
Fatty acids, C16-18 (even-numbered) and C18-unsatd., tetraesters with 2,2 bis(hydroxymethyl) 1,3-propanediol	19321-40-5 (242-960-5)	100%

3.2 Mixture

Chemical nature: Not applicable. Product is a substance.

This is not intended to be a complete compositional disclosure. See Section 8 for Exposure Limits, if any.



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Section 4 - First aid measures

4.1 Description of first aid measures

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing becomes difficult, get medical attention.
- Skin Contact:** Wipe excess away with a dry towel, and wash with soap and water. Remove contaminated clothing and shoes. If a rash or skin irritation occurs, contact a physician.
- Eye Contact:** Flush with copious amounts of water for at least 15 minutes, lifting eyelids for maximum effectiveness. Get medical attention if irritation persists.
- Ingestion:** If swallowed, rinse mouth with water. Do NOT induce vomiting. Consult a physician/poison control center if you feel unwell. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

- Inhalation:** Mists may cause irritation of the respiratory tract.
- Skin:** May cause mild skin irritation upon prolonged or repeated contact.
- Eyes:** May cause mild eye irritation.
- Ingestion:** May cause gastrointestinal distress.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.
- Unsuitable extinguishing media:** Water jet.

5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. Under fire conditions, product may undergo thermal decomposition and emit toxic fumes of CO_x.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus and protective clothing should be used. Water may be used to cool containers to prevent pressure buildup and possible rupture when exposed to extreme heat. If possible, water contaminated by this material should be contained and prevented from being discharged to any waterway, sewer, or drain to avoid environmental contamination.

Section 6 - Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Product is slippery. Avoid falls. Avoid contact with skin and eyes. Wear protective gloves, eye protection, and face protection. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers, and waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Take up with inert absorbent material (e.g. vermiculite, general purpose binder). Shovel or sweep up product and place into an approved container for proper disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Dispose of material in accordance with local, state and federal regulations.

6.4 Reference to other sections

See section 13 for any additional waste treatment or disposal information.



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Section 7 - Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Wear protective gloves, eye protection, and face protection. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Wash contaminated clothing and shoes before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated area away from incompatible materials (see Section 10.5). Keep container tightly closed. Protect containers from physical damage. Containers may be hazardous when empty as they contain product residues.

7.3 Specific end uses

Apart from uses mentioned in Section 1.2, no other uses are specified.

Section 8 - Exposure controls/personal protection

8.1 Control parameters

Component/CAS No.	Basis	Type	Value	Remarks
None				-

8.2 Exposure Controls

Engineering Measures:	Safety measures and appropriate working conditions should be given priority, with use of personal protective equipment a secondary measure. Use adequate ventilation to reduce the exposure of mists or vapors. Facility should be equipped with an eyewash station and safety shower.
Hygiene Measures:	Avoid contact with eyes or skin. Wash hands thoroughly after use and before eating, drinking or bathroom use.
Personal Protective Equipment (PPE):	
Hand Protection:	Wear gloves recommended by glove supplier as impervious to materials in Section 3.
Eye Protection:	Wear protective goggles or safety glasses with side shields and/or full face shield.
Skin Protection:	Wear protective clothing.
Respiratory Protection:	None required under normal conditions. If ventilation is limited or use may generate aerosols or mists, use full-face respirator with multi-purpose cartridges.

Section 9 - Physical and chemical properties

9.1 Information of basic physical and chemical properties

Form and Appearance:	Clear, yellow to amber liquid	Odor:	Faint
pH:	N/A	Odor Threshold:	N/D
Boiling Point:	> 644°F (340°C)	Melting/Freezing point:	~ -31°F (-35°C) (pour point)
Vapor Pressure:	< 0.01 mmHg @ 20°C	Vapor Density (Air=1):	N/D
Flash Point:	~ 644°F (340°C) (COC)	Evaporation Rate:	N/D
UEL:	N/D	LEL:	N/D
Viscosity:	~ 66 cSt @ 20°C	Solubility in Water:	Insoluble
Octanol/Water Partition Coefficient:	27.49 (QSAR)	Specific Gravity/Bulk Density:	~ 0.93 @ 25°C



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Auto-ignition temperature: N/D
Volatile content: < 0.5%

Decomposition Temperature: N/D
VOC Data: N/D

9.2 Other information

No data available.

Section 10 - Stability and reactivity

10.1 Reactivity

None known.

10.2 Chemical stability

Product is stable under ordinary conditions of use and storage.

10.3 Possibility of hazardous reactions

Will not occur under ordinary conditions of use and storage.

10.4 Conditions to avoid

Exposure to moist air or water, extreme heat, contact with incompatibles.

10.5 Incompatible materials

Strong oxidizers, strong acids.

10.6 Hazardous decomposition products

Thermal decomposition may produce toxic fumes of CO_x.

Section 11 - Toxicological information

11.1 Information on toxicological effects

Acute Oral Toxicity

LD50, rat: > 2,000 mg/kg

Acute Inhalation Toxicity

No data available

Acute Dermal Toxicity

No data available

Skin Irritation/Corrosion

Non-irritating

Eye Irritation/Corrosion

Non-irritating

Sensitization

No effects known

Genotoxicity in Vitro

No data available

Mutagenicity

No data available

Specific Target Organ Toxicity – Single Exposure

No data available



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Specific Target Organ Toxicity – Repeated Exposure

No effects known

Aspiration Hazard

No effects known

11.2 Further Information

This material is not listed as a carcinogen by IARC, ACGIH, NTP, or OSHA. No data is available regarding the mutagenicity or teratogenicity of this material in humans, nor is there available data that indicates that it causes adverse development or fertility effects in humans. Handle in accordance with good industrial hygiene and safety practice.

Section 12 - Ecological information

12.1 Toxicity

Acute and Chronic Aquatic Toxicity: LC50 (96h) – Rainbow trout: > 100 mg/l EC50 (48h) – Daphnia: > 100 mg/l

12.2 Persistence and Degradability

Readily biodegradable. Eliminability: > 70% in 28d

12.3 Bioaccumulation Potential

Not expected to bioaccumulate.

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

Substance is neither PBT nor vPvB.

12.6 Other Adverse Effects

Do not allow material to run into surface waters, wastewater, or soil.

Section 13 - Disposal considerations

13.1 Waste treatment methods

Methods of disposal: Dispose of in accordance with local, state, provincial and national disposal regulations. Containers may be hazardous when empty as they contain product residues.

Hazardous waste: This material, as sold, is not considered a hazardous waste under RCRA 40 CFR 261.

Section 14 - Transport regulations

Land Transport (DOT, ADR/RID)

Not classified as dangerous in transport

Air Transport (IATA/ICAO)

Not classified as dangerous in transport

Marine Transport (IMDG)

Not classified as dangerous in transport

Section 15 - Regulatory information



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15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal Regulations

SARA 311/312 Hazards	No applicable hazards
SARA 302/304 (TPQ/RQ)	No components listed
SARA 313	No components listed
CERCLA (RQ)	No components listed
CAA 112(b) HAPS	No components listed

U.S. State Regulations

California Prop. 65	No components listed
State RTK/HSL Information	No components listed

International Regulations

No additional information available

Chemical Inventory Listing

United States (TSCA)	Complies with inventory
European Union (EINECS/ELINCS/NLP)	Complies with inventory
Australia (AICS)	Complies with inventory
Philippines (PICCS)	Complies with inventory
Canada (DSL/NDSL)	Complies with inventory
Korea (KECL)	Complies with inventory
Japan (ENCS/ISHL)	Complies with inventory
China (IECSC)	Complies with inventory
New Zealand (NZIoC)	Complies with inventory

Section 16 – Additional information

Date of latest revision: 8/8/2018

Key to Abbreviations:

N/D - Not determined N/A - Not applicable N/E - Not established WSL – Water solubility limit

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