

Pulsarlube PL4 (Food Machinery Grease)

1. MANUFACTURER INFORMATION

- 1) Product Name : Pulsarlube PL4 (Food Machinery Grease)
- 2) Recommended use of the chemical and restrictions on use
 - A. Product description : An electrochemical automatic single point lubricator
 - B. Restrictions on use : Not available except the intended use of the product

3) Supplier's details

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Emergency telephone number +82 (02) 2083-8488

2. HAZARDS IDENTIFICATION

1) Hazard / Risk Classification

Not applicable

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification Not classified as hazardous under OSHA.

2) Label elements including precautionary statements

Pictogram

Not applicable

Signal word : Not applicable

Hazard/Risk Statement :

Not applicable

Precautionary Statement

<Prevention>

Not applicable

<Response>

Not applicable

<Storage>

Not Applicable

<Disposal>

Not applicable

3) Other Hazard Risk which do not included in the classification criteria

By handling of chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

PSDS (Product Safety Data Sheet)**3. COMPOSITION/INFORMATION ON INGREDIENTS****General information**

No Hazardous Components

Note: Specific chemical identities and/or exact percentages have been withheld as a trade secret.

4. FIRST AID MEASURES**General advice**

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically.

In case of skin contact

Wash with soap and water. Get medical attention if irritation develops or persists.

If inhaled

This material does not present a hazard if inhaled. Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.

In case of eye contact

Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.

In case of ingestion

Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.

5. FIRE FIGHTING MEASURES**Extinguishing media****Suitable extinguishing media**

Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires.

Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire.

Do Not direct a stream of water into the hot burning liquid.

Fire and/or Explosion Hazards

Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.

Fire Fighting Methods and Protection

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use appropriate methods for the surrounding fire.

Hazardous Combustion Products

Oxides of carbon, Calcium oxides, Sulfur oxides

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

No health effects expected from the clean-up of this material, if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this SDS.

Methods and materials for containment and cleaning up

Collect and discard in accordance with local, state and national regulations.

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7. HANDLING AND STORAGE

Precautions for safe handling

Mildly irritating material. Avoid unnecessary exposure.

Conditions for safe storage, including any incompatibilities

Store in a cool dry place. Isolate from incompatible materials.

Incompatible materials

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

No exposure limits in vapor form.

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Respiratory protection

No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur. A respirator is not normally required.

Eye protection

Wear safety glasses when handling this product.

Hands protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Not normally considered a skin hazard. Where use of product can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance	Viscous Liquid, White to off-white
b) Odour	Mild Petroleum Type
c) Odour threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	> 446 °F (230 °C)
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	no data available
l) Solubility	Negligible; 0-1%
m) Vapor density	no data available
n) Relative density	1.05
o) Partition coefficient: n-octanol/water	no data available

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p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	Typical 300000 - 400000 cP
s) Formula mass	no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Contamination

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Decomposition and hazardous decomposition products are unlikely..

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

- Eye contact, Skin contact, Inhalation
- Acute toxic
 - No chemical interaction known to affect toxicity..

Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation	Can cause minor respiratory irritation.
Skin Contact	Can cause minor skin irritation, defatting, and dermatitis.
Skin Absorption	No absorption hazard expected in normal industrial use.
Eye Contact	Can cause minor irritation, tearing and reddening.
Ingestion Irritation	Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort.
Ingestion Toxicity	Not believed to have any significant toxicity.

Long-Term (Chronic) Health Effects

Carcinogenicity	Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.
Reproductive and Developmental Toxicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Inhalation	Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.
Skin Contact	Upon prolonged or repeated contact, can cause minor skin irritation, defatting, and dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity : No ecological information available

- Fish
- Crustaceans

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- Algae

Persistence and degradability

- Persistence
 - no data available
- Degradability
 - no data available

Bioaccumulative potential

- Bioaccumulative potential
 - no data available
- Biodegradation
 - no data available

Mobility in soil

- no data available

Other adverse effects

- no data available

13. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product

Disposal Methods

Waste Disposal Code(s)

Spent or discarded material is not expected to be a hazardous waste.
 Dispose of in accordance with Local and National regulations.
 Not applicable

Above all, Dispose of in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

Grease, Non-Hazardous

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine pollute: no IATA: no

Special precautions for user

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- Air transport(IATA): Not subject to IATA regulations.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available

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15. REGULATORY INFORMATION

REGULATORY INFORMATION

- TSCA Status
 - All components in this product are on the TSCA Inventory or exempt
- Canadian DSL
 - Not all components of this product have been verified to be on the Canadian DSL or NDSL
- U.S. Federal regulations
 - * OSHA PROCESS SAFETY (29CFR1910.119) - Not classified as hazardous under OSHA
 - Not applicable
 - * CERCLA Section 103 (40CFR302.4)
 - Not applicable
 - * EPCRA Section 302 (40CFR355.30)
 - Not applicable
 - * EPCRA Section 304 (40CFR355.40)
 - Not applicable
 - * EPCRA Section 313 (40CFR372.65)
 - Not applicable
- Rotterdam Convention listed ingredients
 - Not applicable
- Stockholm Convention listed ingredients
 - Not applicable
- Montreal Protocol listed ingredients
 - Not applicable

Chemical Name	CAS	# Regulation	Percent
No 313-listed chemicals in this product		SARA 313	

16. OTHER INFORMATION

1) Source of the data

- (1) Chemical manufacturer's information : SDS(SAFETY DATA SHEET) Data
- (2) Chem Guide CAS DataBase
- (3) Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
- (4) ECB-ESIS(European chemical Substances Information System)(<http://ecb.jrc.it/esis>)
- (5) ECOTOX Database, EPA(<http://cfpub.epa.gov/ecotox>)
- (6) IUCLID Chemical Data Sheet, EC-ECB
- (7) International Chemical Safety Cards(ICSC)(<http://www.nihs.go.jp/ICSC>)
- (8) TOXNET, U.S. National Library of Medicine(<http://toxnet.nlm.nih.gov>)
- (9) The Chemical Database, The Department of Chemistry at the University of Akron
(<http://ull.chemistry.uakron.edu/erd>)
- (10) Korea Information System for Chemical Safety, KISChem (<http://kischem.nier.go.kr>)
- (11) Chemical information system (<http://ncis.nier.go.kr>)
- (12) Grease Raw material manufacturer's information : PSDS(PRODUCT SAFETY DATA SHEET) Data

2) The first creation date : 2015.02.11

3) The number of times, and the final revision date : Revision times 05

The final revision date : 2021.12.29

Further information

Pulsarlube has prepared copyrighted Product Safety Datasheets to provide information on the different Pulsarlube automatic grease lubricator systems. As defined in above the text Pulsarlube automatic grease lubricator are manufactured articles, which do not result in exposure to a hazardous chemical under normal conditions of use. The information and recommendations set forth herein are made in good faith, for information only, and are believed to be accurate as of the date of preparation. However, Pulsarlube USA, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.