

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

KLT Co., Ltd. 6-19, Hansan-ro, Tanhyeon-myeon, Paju-si, Gyeonggi-do, Republic of Korea	Telephone Number for Information: Tel.: +82 (02) 2083-8488 Fax : +82 (02) 2083-8485 sales.asia@pulsarlube.com
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Emergency telephone number +82 (02) 2083-8488

2. HAZARDS IDENTIFICATION

1) Hazard / Risk Classification

Not applicable

(The product has not been classified as hazardous and does not need to be labelled according to regulation (EU) no 1272/2008 (CLP))

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>

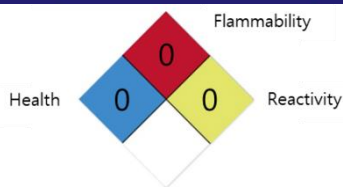
Not Applicable

<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.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

General information

Lubricating grease: Thickener system and additives in synthetic base oil.
The components are not hazardous or are below required disclosure limits.

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.

In case of skin contact

Wash skin with soap and copious amounts of water. Consult a physician.
Wash contaminated clothing thoroughly with water before removing it, or wear gloves
Remove contaminated clothing and shoe
Get medical attention if adverse health effects persist or are severe

If inhaled

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

In case of eye contact

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. If irritation persists, consult a physician.

If swallowed

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Extinguishing media**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Use alcohol-resistant foam, dry chemical or carbon dioxide.
Avoid use of water jet for extinguishing

Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.
Cool containers with water until well after fire is out.
Keep unauthorized personnel out.
Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
Keep containers cool with water spray

Further information

None

PSDS (Product Safety Data Sheet)**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. No action shall be taken involving any personal risk or without suitable training. In case of spills, beware of slippery floors and surfaces.

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

Dispose of via a licensed waste disposal contractor.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist and avoid formation of dust and aerosols. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic. air, light, and moisture sensitive. Store under inert gas. Store in accordance with local regulations.

Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure limits**

None of the components have assigned exposure limits.

Appropriate engineering controls

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

Personal protective equipment**Respiratory protection**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

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

Personal protective equipment for the body should be selected based on the task being performed and the risks.

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involved and should be approved by a specialist before handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance	Solid Paste, White
b) Odour	Odorless
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	> 200 °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	Insoluble
m) Vapor density	no data available
n) Relative density	0.91 @ 15 °C
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Formula mass	no data available

10. STABILITY AND REACTIVITY

Chemical stability

This material is stable under recommended storage and handling conditions.

Possibility of hazardous reactions

Hazardous Polymerization will not occur.

Conditions to avoid

Avoid contact with incompatible materials and condition.

Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surface.

Incompatible materials

Strong oxidizing substances. Strong acids. Strong bases

Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

- Respiratory tracts : no data available
- Oral : no data available
- Eye-Skin : no data available
- Acute toxic
 - Not classified for acute toxicity based on available data.

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- Skin corrosion/irritation
 - Prolonged or repeated contact may cause irritation.
- Serious eye damage/irritation
 - Splashes may irritate.
- Respiratory sensitization
 - Respiratory sensitizer: Based on available data, the classification criteria are not met.
- Skin sensitization
 - Skin sensitizer: Based on available data, the classification criteria are not met.
- Carcinogenicity
 - Based on available data, the classification criteria are not met.
 - * IARC
 - no data available
 - * ACGIH
 - no data available
 - * NTP
 - no data available
 - * EU CLP
 - no data available
- Germ cell mutagenicity
 - Based on available data, the classification criteria are not met.
- Reproductive toxicity
 - Based on available data, the classification criteria are not met.
- STOT-single exposure
 - Based on available data, the classification criteria are not met.
- STOT-repeated exposure
 - Based on available data, the classification criteria are not met.
- Aspiration hazard
 - Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity : Based on available data, the classification criteria are not met.

- Fish
- Crustaceans
- Algae

Persistence and degradability

- Persistence
 - Not applicable for mixtures
- Degradability
 - Not applicable for mixtures

Bioaccumulative potential

- Bioaccumulative potential
 - Not applicable for mixtures
- Biodegradation
 - Not applicable for mixtures

Mobility in soil

- Not applicable for mixtures

Other adverse effects

- no data available

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13. DISPOSAL CONSIDERATIONS

Disposal methods

Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Contact a licensed professional waste disposal service to dispose of this material.

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

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

REGULATORY INFORMATION

- POPs Management Law
 - Not applicable
- Information of EU Classification
 - * Classification
 - * Safety Phrase
- U.S. Federal regulations
 - * OSHA PROCESS SAFETY (29CFR1910.119)
 - 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

PSDS (Product Safety Data Sheet)**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 03

The final revision date : 2017.06.12

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.