

# Pulsarlube PL7 (Low Temperature Grease)

## 1. MANUFACTURER INFORMATION

- 1) Product Name : Pulsarlube PL7 (Low Temperature 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.

597-2, Geumseung-ri Tanhyeonmyeon,

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

Emergency telephone number +82 (02) 2083-8488

## 2. HAZARDS IDENTIFICATION

### 1) Hazard / Risk Classification

- Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2) Label elements including precautionary statements

#### ○ Pictogram



- Signal word : Warning
- Hazard/Risk Statement :
  - H302 Harmful if swallowed
  - H315 Causes skin irritation
  - H319 Causes serious eye irritation
  - H335 May causes respiratory irritation
  - H360 May damage fertility or the unborn child
  - H370 Causes damage to organ
  - H372 Causes damage to organs through prolonged or repeated exposure
  - H412 Harmful to aquatic life with long lasting effects.
- Precautionary Statement

## PSDS (Product Safety Data Sheet)

### <Prevention>

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understand.
- P260 Do not breathe dust/fume/gas/vapours/spray.
- P264 Wash... thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

### <Response>

- P302+P352 IF ON SKIN : Immerse in cool water [or wrap in wet bandages].
- P304+P340 IF INHALED : Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES : Rinse cautiously with water for several minutes. Remove contract lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned : Get medical advice/attention
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment (see ... on this label).
- P330 Rinse mouth.
- P332+P313 If skin irritation occurs : Get medical advice/attention.
- P337+P313 If eye irritation persists : Get medical advice/attention.
- P362 Take off contaminated clothing.

### <Storage>

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

### <Disposal>

- P501 Dispose of contents/containers to ... in accordance with local/regional/national/international regulations (to be specified).

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

Material / NFPA	Health	Flammability	Reactivity
1) bis(nonylphenyl)amine	1	1	0
2) Phenol,isobutyleneated,phosphate (3:1)	0	1	0
3) Proprietary (S1)	1	1	0

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Other name	CAS No	Content (%)
1) bis(nonylphenyl)amine	bis(nonylphenyl)amine	36878-20-3	75.0 ~ 85.0
2) Phenol,isobutyleneated, phosphate (3:1)	Phenol,isobutyleneated, phosphate (3:1)	68937-40-6	15.0 ~ 20.0
3) Proprietary (S1)	Proprietary (S1)	Proprietary (S1)	Proprietary (S1)

## 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

## PSDS (Product Safety Data Sheet)

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 and If not breathing, if breathing is irregular or if respiratory arrest occurs, get medical attention. Provide artificial respiration or oxygen by trained personnel 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. Get medical attention if irritation occurs.

### 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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Potassium oxides, Hydrogen iodide (Based on the electrolyte)  
Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), hydrogen sulfide (H<sub>2</sub>S), phosphorus oxides (PO<sub>x</sub>), ammonia, aldehydes, hydrocarbons, smoke and irritating vapours as products of incomplete combustion. (Based on the Grease)

#### Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

#### Further information

None

## 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

### 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

## PSDS (Product Safety Data Sheet)

### 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

- 1) bis(nonylphenyl)amine
  - ACGIH : none
  - biological limit values : none
- 2) Phenol,isobutylenated,phosphate (3:1)
  - ACGIH : none
  - biological limit values : none
- 3) Proprietary (S1)
  - ACGIH : none
  - biological limit values : none

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- |  |   |
|--|---|
| a) Appearance                              | Buttery, smooth, semi-solid, Gold   |
| b) Odour                                   | Mild grease like.   |
| 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                             | 187 °C (369 °F), Method: Cleveland open cup                               |
| h) Evaporation rate                        | no data available   |
| i) Flammability (solid, gas)               | Low fire hazard. This material must be heated before ignition will occur. |

## PSDS (Product Safety Data Sheet)

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	0.8892 kg/l @ (15 °C / 59 °F)
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	129.8 cSt (40 °C / 104 °F), 15.6 cSt (100 °C / 212 °F)
s) Formula mass	no data available

## 10. STABILITY AND REACTIVITY

### Reactivity

No specific test data related to reactivity available for this product or its ingredients

### Chemical stability

The product is stable.

### Possibility of hazardous reactions

The product is stable.

### Conditions to avoid

no data available

### Incompatible materials

Materials to avoid : Reactive with oxidising agents, reducing agents, acidic clay, acids and alkalis.

### Hazardous decomposition products

Hazardous decomposition Products : May release CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>, PO<sub>x</sub>, H<sub>2</sub>S, metal oxides, lithium compounds, smoke and irritating vapours when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Acute toxic

- Acute oral toxicity : Remarks: no data available

- Acute inhalation toxicity : Remarks: no data available

- Acute dermal toxicity : Remarks: no data available

Skin corrosive/irritant : Result: Mild skin irritation

Serious eye damage/eye irritation : Result: Mild eye irritation

Respiratory sensitization : no data available

Skin sensitization : Mild skin irritation

Carcinogenicity : no data available

Germ Cell Mutagenicity : no data available

Reproductive toxicity : no data available

Specific target organ toxicity (single exposure) : no data available

Specific target organ toxicity (repeated exposure) : no data available

Aspiration hazard : no data available

## PSDS (Product Safety Data Sheet)

### 12. ECOLOGICAL INFORMATION

#### Toxicity

Fish : Remarks: no data available  
 Crustacea : Remarks: no data available  
 Algae : Remarks: no data available

#### Persistence and degradability

Remarks: no data available

#### Bioaccumulative potential

Remarks: no data available

#### Mobility in soil

no data available

#### Results of PBT and vPvB assessment

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Other adverse effects

no data available

### 13. DISPOSAL CONSIDERATIONS

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product

**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:      Not dangerous goods  
 IMDG:      Not dangerous goods  
 IATA:      Not dangerous goods

#### 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

no data available

### 15. REGULATORY INFORMATION

#### REGULATORY INFORMATION

**PSDS (Product Safety Data Sheet)**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available

**Chemical Safety Assessment**  
no data available

**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>)

2) The first creation date : 2015.02.11

3) The number of times, and the final revision date : Revision times 0

The final revision date : 2015.02.11

**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.*