

Pulsarlube PL6 (Multipurpose Grease with MoS2)

1. MANUFACTURER INFORMATION

1) Product Name: Pulsarlube PL6 (Multipurpose Grease with MoS₂)

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

Supplier's details

Pulsarlube GmbH Telephone Number for Information:

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2. HAZARDS IDENTIFICATION

1) Hazard / Risk Classification

Not applicable

(This material is not hazardous according to GHS regulatory guidelines)

- 2) Label elements including precautionary statements
 - Pictogram

Not applicable

- Signal word : Not applicable
- o 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

This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.



3. COMPOSITION/INFORMATION ON INGREDIENTS

General information

Reportable Hazardous Substance(s) or Complex Substance(s)

| Chemical name | Other name | CAS No | Content (%) |
|--|--------------------------------------|------------|-------------|
| 1.Benzene, polypropene derivs. | - | 68081-77-6 | 20 ~ 30 % |
| 2.Benzene,mono-C10-13-alkyl derivs., distn. resi-dues | ALKYLAT 150 | 84961-70-6 | 20 ~ 30 % |
| 3.Benzene, C14-30-alkyl derivs. | BENZENE, C14-30-ALKYL DERIVATIVES | 68855-24-3 | 20 ~ 30 % |

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

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Wash skin thoroughly with soap and water or use recognized skin cleanser.

Wash clothing before reuse.

Seek medical advice.

In the event of a known, or potential, high pressure injection injury, worker should obtain immediate medical evaluation.

If inhaled

Move to fresh air.

Artificial respiration and/or oxygen may be necessary.

Seek medical advice.

In case of eye contact

Remove contact lenses.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

If swallowed

Rinse mouth with water.

Never give anything by mouth to an unconscious person.

DO NOT induce vomiting unless directed to do so by a physi-cian or poison control center.

Seek medical advice.

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.

Flev 03

Avoid use of water jet for extinguishing

Special hazards arising from the substance or mixture

Carbon oxides (CO, CO2), nitrogen oxides (NOx), phosphorus oxides (POx), hydrogen sulphide (H2S), ammonia, smoke and irritating vapours as products of incomplete combustion.

Advice for firefighters

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Material can create slippery conditions.

Environmental precautions

Do not allow uncontrolled discharge of product into the envi-ronment.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

Remove all sources of ignition.

Soak up with inert absorbent material.

Non-sparking tools should be used.

Ensure adequate ventilation.

Contact the proper local authorities.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-plication area.

In case of insufficient ventilation, wear suitable respiratory equipment.

Avoid contact with skin, eyes and clothing.

Do not ingest.

Keep away from heat and sources of ignition.

Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in original container.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Keep in a dry, cool and well-ventilated place.

Keep in properly labelled containers.

To maintain product quality, do not store in heat or direct sun-light.

Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters



Exposure limits

Contains no substances with occupational exposure limit values.

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, | Grav |
|----|------------|---------------------------------|------|
| a) | Appearance | buttery, Sillouti, Seill-Soliu, | |

b) Odour
 c) Odour threshold
 d) pH
 no data available
 e) Meting point/freezing point
 no data available
 no data available
 no data available
 no data available

g) Flash point 187 °C (369 °F) Method: Cleveland open cup Base Fluid Blend

h) Evaporation rate no data available

i) Flammability (solid, gas) Low fire hazard. This material must be heated before ignition will occur.

j) Upper/lower flammability or explosive limits no data availablek) Vapor pressure no data available

I) Solubility insoluble

m) Vapor density no data available
 n) Relative density 0.9098 @ 15 ℃
 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) Base Fluid Blend

15.6 cSt (100 °C / 212 °F) Base Fluid Blend

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

no data available

Incompatible materials

Reactive with oxidising agents, acids, alkalis, acidic clay and reducing agents.

Hazardous decomposition products

May release COx, NOx, SOx, POx, H2S, MoOx, metal oxides, lithium compounds, smoke and irritating vapours when heated to decomposition.

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 | | | | | | |
| * Oral - 2000mg/kg < ATEmix <= 5000mg/kg - [Benzene, C14-30-alkyl derivs.] : LD50 (Rat): > 15,800 mg/kg, * Dermal - ATE MIX : >5000mg/kg - [Benzene, C14-30-alkyl derivs] : LD50 (Rabbit): > 7,940 mg/kg, | | | | | | |
| Skin corrosion/irritation | | | | | | |
| - no data available | | | | | | |
| Serious eye damage/irritationno data available | | | | | | |
| Respiratory sensitization | | | | | | |
| - no data available | | | | | | |
| Skin sensitization | | | | | | |
| - no data available | | | | | | |
| Carcinogenicity | | | | | | |
| - Based on available data, the classification criteria are not met. * IARC | | | | | | |
| - no data available * ACGIH | | | | | | |
| no data availableNTP | | | | | | |
| no data availableEU CLP | | | | | | |
| - no data available | | | | | | |
| ○ Germ cell mutagenicity | | | | | | |
| - no data available | | | | | | |
| Reproductive toxicity | | | | | | |
| - no data available | | | | | | |
| ○ STOT-single exposure | | | | | | |
| - no data available | | | | | | |
| ○ STOT-repeated exposure | | | | | | |
| - no data available | | | | | | |
| Aspiration hazard | | | | | | |
| - no data available | | | | | | |



12. ECOLOGICAL INFORMATION

| Ecotoxicity: | Material Not | expected to | be harmful to | aquatic organisms. |
|--------------|--------------|-------------|---------------|--------------------|
| | | | | |

O Fish

Crustaceans

○ Algae

Persistence and degradability

Persistence

- no data available

Degradability

- no data available

Bioaccumulative potential

Bioaccumulative potential

- no data available

Biodegration

- no data available

Mobility in soil

- no data available

Other adverse effects

- no data available

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
- O 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

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:// 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.