

Pulsarlube PL7 (Low Temperature Grease)

1. MANUFACTURER INFORMATION

1) Product Name : Pulsarlube PL7 (Low Temperature Grease)

Unique Formula Identifier (UFI) : R800-90Q5-X00R-PEGJ

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

Pulsarlube GmbH
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 65929 Frankfurt am Main,
 Germany

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2. HAZARDS IDENTIFICATION

1) Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Reproductive toxicity, Category 2

H361f: Suspected of damaging fertility.

Long-term (chronic) aquatic hazard,
 Category 3

H412: Harmful to aquatic life with long lasting effects.

2) Label elements

Labelling (REGULATION (EC) No 1272/2008)

o Hazard pictograms :



o Signal word : Warning

o Hazard statements : H361f Suspected of damaging fertility.

H412 Harmful to aquatic life with long lasting effects.

o Precautionary statements

<Prevention>

P201 Obtain special instructions before use.

- P202 Do not handle until all safety precautions have been read and understood.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

<Response>

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

<Disposal>

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label :

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Additional Labelling

EUH208 Contains Fatty acids, C18-unsatd., dimers, compds. with 4, 5-dihydro- 2-nortall- oil alkyl 1H-imidazole-1-ethanol and tall-oil fatty acids, Succinic Anhydride, Alkylation Products With C12-Rich Branched Olefins From Propene Oligomerisation, Hydrolyzed, Esterification Products with propylene oxide. May produce an allergic reaction.

3) Other hazards

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS
2) Mixtures
Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1 270-128-1	Aquatic Chronic 3;H412 Repr. 2; H361f	3 - 10
Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified	64742-53-6 265-156-6 649-466-00-2	Asp. Tox. 1; H304 Acute Tox. 4; H332	1 - 10
Amines, C12-14-alkyl, C6-10-alkyl phosphates	68603-55-4 271-663-3	Skin irr. 2; H315 Aquatic Acute 1;H400 Aquatic Chronic 3;H412	1 - 2.5
Phenol, isobutylated, phosphate (3:1)	68937-40-6 273-065-8	Aquatic Acute 1;H400 Aquatic Chronic 1;H410	0.25 - 1
Fatty acids, C18-unsatd., dimers, compds. with 4, 5-dihydro- 2-nortall-oil alkyl 1H-imidazole-1-ethanol and tall-oil fatty acids	948-074-1	Skin Sens. 1B; H317 Aquatic Chronic 3;H412	0.25 - 1
Succinic Anhydride, Alkylation Products With C12-Rich Branched Olefins From Propene Oligomerisation, Hydrolyzed,	943-535-3	Eye Dam. 2; H319 Skin Sens. 1B; H317	0.1 - 1

Esterification Products with propylene oxide		
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For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

1) Description of first aid measures

- | | |
|-------------------------|--|
| If inhaled | : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.. |
| 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. |
| 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.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
Seek medical advice. |

2) Most important symptoms and effects, both acute and delayed

- | | |
|-------|---|
| Risks | : First aider needs to protect himself. |
|-------|---|

3) Indication of any immediate medical attention and special treatment needed

- | | |
|-----------|--------------------------|
| Treatment | : Treat symptomatically. |
|-----------|--------------------------|

5. FIREFIGHTING MEASURES

1) Extinguishing media

- | | |
|--------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : No information available. |

2) Special hazards arising from the substance or mixture

- | | |
|--------------------------------------|---|
| Specific hazards during firefighting | : Cool closed containers exposed to fire with water spray. |
| Hazardous combustion products | : Carbon oxides (CO, CO ₂), nitrogen oxides (NO _x), sulphur oxides (SO _x), sulphur compounds (H ₂ S), alkyl mercaptans, sulfides, smoke and irritating vapours as products of incomplete combustion. |

3) Advice for firefighters

- | | |
|---------------------|---|
| Further information | : Prevent fire extinguishing water from contaminating surface water or the ground water system. |
|---------------------|---|

6. ACCIDENTAL RELEASE MEASURES

1) Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
 Ensure adequate ventilation.
 Evacuate personnel to safe areas.
 Material can create slippery conditions.
 Mark the contaminated area with signs and prevent access to unauthorized personnel.
 Only qualified personnel equipped with suitable protective equipment may intervene.

2) Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.

3) Methods and material for containment and cleaning up

Methods for 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.

4) Reference to other sections

For personal protection see section 8.

7. HANDLING AND STORAGE

1) Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application 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.

Advice on protection against fire and explosion : None known.

Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

2) Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : 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 sunlight.

3) Specific end use(s)

Specific use(s) : No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

1) Control parameters

8-hour TLV-TWA of 5 mg/m³ recommended by manufacturer based on ACGIH TLV for mineral oil mists.

Consult local authorities for acceptable exposure limits.

2) Exposure controls

Engineering measures

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye/face protection	: Wear face-shield and protective suit for abnormal processing problems.
Hand protection	
Material	: neoprene, nitrile, polyvinyl alcohol (PVA), Viton®.
Remarks	: 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.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Filter type	: organic vapour filter
Protective measures	: Wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

1) Information on basic physical and chemical properties

Physical state	: Buttery, smooth, semi-solid
Colour	: gold
Odour	: Mild grease like.
Odour Threshold	: No data available
Pour point	: -54 °C Base Fluid Blend
Boiling point/boiling range	: No data available
Flash point	: 187 °C Method: Cleveland open cup Base Fluid Blend
Fire Point	: 203 °C Base Fluid Blend
Auto-Ignition Temperature	: No data available
Evaporation rate	: No data available
Upper explosion limit	: No data available
/ Upper flammability limit	
Lower explosion limit	: No data available
/ Lower flammability limit	
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.8903 kg/l (15 °C)
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 129.8 cSt (40 °C) Base Fluid Blend 15.6 cSt (100 °C) Base Fluid Blend
Flammability	: Low fire hazard. This material must be heated before ignition will occur.
Explosive properties	: Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

2) Other information

No data available

10. STABILITY AND REACTIVITY

1) Reactivity

No dangerous reaction known under conditions of normal use.

2) Chemical stability

Stable under normal conditions.

3) Possibility of hazardous reactions

Hazardous reactions : Hazardous polymerisation does not occur.
Stable under normal conditions.

4) Conditions to avoid

Conditions to avoid : No data available

5) Incompatible materials

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

6) Hazardous decomposition products

Hazardous decomposition products : May release CO_x, NO_x, SO_x, PO_x, H₂S, KO_x, SbO_x, sulfides, alkyl mercaptans, diphenylamine, alkenes, smoke and irritating vapours when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

1) Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure : Eye contact
Ingestion
Inhalation
Skin contact

Acute toxic

Product :

Acute oral toxicity : Remarks: No data available
Acute inhalation toxicity : Remarks: No data available
Acute dermal toxicity : Remarks: No data available

Components :

Amines, C12-14-alkyl, C6-10-alkyl phosphates:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg,

Phenol, isobutyleneated, phosphate (3:1):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,
Acute inhalation toxicity : LC50 (Rat): > 200 mg/l
Exposure time: 1 h
Test atmosphere: vapour
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg,

Skin corrosion/irritation

Product :

Remarks : No data available

Serious eye damage/eye irritation

Product :

Remarks : No data available

- Respiratory or skin sensitization
- No data available
- Germ cell mutagenicity
- No data available

- Carcinogenicity

Product :

Remarks

: All components listed in Annex VI to which Note L applies, and contained in the product, have been shown to contain less than 3% DMSO extractables as measured by IP346.

- Reproductive toxicity
- No data available
- STOT-single exposure
- No data available
- STOT-repeated exposure
- No data available

2) Information on other hazards
Endocrine disrupting properties
Product :

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12. ECOLOGICAL INFORMATION
1) Toxicity
Product :

Toxicity to fish	: Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	: Remarks: No data available
Toxicity to algae/aquatic plants	: Remarks: No data available
Toxicity to microorganisms	: Remarks: No data available

Components :
Phenol, isobutyleneated, phosphate (3:1):

Toxicity to fish	: LC50 (Fish): 0.8 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia (water flea)): 0.202 mg/l Exposure time: 48 h
Toxicity to fish (Chronic toxicity)	: NOEC: 0.093 mg/l Exposure time: 90 d Species: Lepomis macrochirus (Bluegill sunfish)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.0399 mg/l Exposure time: 21 d Species: Daphnia (water flea)

2) Persistence and degradability
Product :

Biodegradability

: Remarks: No data available

3) Bioaccumulative potential

No data available

4) Mobility in soil

No data available

5) Results of PBT and vPvB assessment
Product :

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.

6) Endocrine disrupting properties
Product :

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

7) Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS
1) Waste treatment methods

Product

 : The product should not be allowed to enter drains, water courses or the soil.
 Offer surplus and non-recyclable solutions to a licensed disposal company.
 Waste must be classified and labelled prior to recycling or disposal.
 Send to a licensed waste management company.
 Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

14. TRANSPORT INFORMATION
1) UN number or ID number

 IMDG
 IATA

 : Not regulated as a dangerous good
 : Not regulated as a dangerous good

2) UN proper shipping name

 IMDG
 IATA

 : Not regulated as a dangerous good
 : Not regulated as a dangerous good

3) Transport hazard class(es)

 IMDG
 IATA

 : Not regulated as a dangerous good
 : Not regulated as a dangerous good

4) Packing group

 IMDG
 IATA (Cargo)
 IATA (Passenger)

 : Not regulated as a dangerous good
 : Not regulated as a dangerous good
 : Not regulated as a dangerous good

5) Environmental hazards

Not regulated as a dangerous good

6) Special precautions for user

Not applicable

7) Maritime transport in bulk according to IMO instruments

Remarks	: ADR: Not Regulated
	: ADN: Not Regulated
	: RID: Not Regulated

15. REGULATORY INFORMATION
1) Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
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Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable
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Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
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REACH - List of substances subject to authorization (Annex XIV)	: Not applicable
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Water hazard class (Germany)	: WGK 2 obviously hazardous to water
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The components of this product are reported in the following inventories:

DSL	: On the inventory, or in compliance with the inventory
TSCA	: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
IECSC	: On the inventory, or in compliance with the inventory

2) Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

16. OTHER INFORMATION
Full text of H-Statements

H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H361f	: Suspected of damaging fertility.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Eye Dam.	: Serious eye damage/eye irritation
Repr.	: Reproductive toxicity
Skin irr.	: Skin corrosion/irritation
Skin Sens.	: Skin sensitisation

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
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ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
AIIC	Australian Inventory of Industrial Chemicals
ASTM	American Society for the Testing of Materials
bw	Body weight
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DIN	Standard of the German Institute for Standardisation
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC-Number	European Community number
ECx	Concentration associated with x% response
ELx	Loading rate associated with x% response
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
ErCx	Concentration associated with x% growth rate response
GHS	Globally Harmonized System
GLP	Good Laboratory Practice
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50	Half maximal inhibitory concentration
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISHL	Industrial Safety and Health Law (Japan)
ISO	International Organisation for Standardization
KECI	Korea Existing Chemicals Inventory
LC50	Lethal Concentration to 50 % of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
n.o.s.	Not Otherwise Specified
NO(A)EC	No Observed (Adverse) Effect Concentration
NO(A)EL	No Observed (Adverse) Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Co-operation and Development
OPPTS	Office of Chemical Safety and Pollution Prevention
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
(Q)SAR	(Quantitative) Structure Activity Relationship
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SADT	Self-Accelerating Decomposition Temperature
SDS	Safety Data Sheet
SVHC	Substance of Very High Concern
TCSI	Taiwan Chemical Substance Inventory
TECI	Thailand Existing Chemicals Inventory
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
UN	United Nations
vPvB	Very Persistent and Very Bioaccumulative

Classification of the mixture:

 Repr. 2
 Aquatic Chronic 3

 H361f
 H412

Classification procedure:

 Calculation method
 Calculation method

2) The first creation date : 11.02.2015

 3) The number of times, and the final revision date : Revision times 05
 The final revision date : 14.07.2023

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.