

# Pulsarlube PL8 (Biodegradable grease)

## 1. MANUFACTURER INFORMATION

- 1) Product Name : Pulsarlube PL8 (Biodegradable 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

Pulsarlube GmbH	Telephone Number for Information:
Silostrasse 31b,	Tel.: +49 (69) 8700-766 - 62 / - 63
65929 Frankfurt am Main,	Fax : +49 (69) 8700-766 - 69
Germany	sales.eu@pulsarlube.com

Emergency telephone number +49 (69) 8700-766 - 62 /- 63

## 2. Hazards identification

### 1) Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

This mixture is not classified as hazardous according to the criteria for classification of the Regulation (EC) 1272/2008 as amended.

### 2) Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

<b>Hazard pictograms</b>	: None.
<b>Signal word</b>	: None.
<b>Hazard statements</b>	: The mixture does not meet the criteria for classification.

#### Precautionary statements

<b>Prevention</b>	: Observe good industrial hygiene practices.
<b>Response</b>	: Wash hands after handling.
<b>Storage</b>	: Store away from incompatible materials.
<b>Disposal</b>	: Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** : EUH210 - Safety data sheet available on request.

### 3) Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have

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endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 3. Composition/information on ingredients

#### 2) Mixtures

##### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	< 0,3	68411-46-1 270-128-1	-	-	

**Classification:** Repr. 2;H361f

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008. "-" = Not available or this substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

ATE: Acute toxicity estimate.

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. #: This substance has been assigned Union workplace exposure limit(s).

**Composition comments** : Occupational Exposure Limits for constituents are listed in Section 8. The full text for all H-statements is displayed in section 16.

### 4. First aid measures

**General information** : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 1) Description of first aid measures

**Inhalation** : Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin contact** : Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** : Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

**Ingestion** : Rinse mouth. If swallowed, do NOT induce vomiting. Get medical attention if symptoms occur.

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

Exposure may cause temporary irritation, redness, or discomfort.

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

Treat symptomatically.

### 5. Firefighting measures

**General fire hazards** : No unusual fire or explosion hazards noted.

#### 1) Extinguishing media

**Suitable extinguishing media** : Foam. Dry chemicals. Carbon dioxide (CO<sub>2</sub>).  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** : Do not use water jet as an extinguisher, as this will spread the fire.

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

See also section 10.

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### 3) Advice for firefighters

- Special protective equipment for firefighters** : Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
- Special fire fighting procedures** : In case of fire and/or explosion do not breathe fumes. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
- Specific methods** : In the event of fire and/or explosion do not breathe fumes.

## 6. Accidental release measures

### 1) Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Wear appropriate personal protective equipment.
- For emergency responders** : Keep unnecessary personnel away.  
For personal protection, see section 8 of the SDS.

### 2) Environmental precautions

Local authorities should be advised if significant spillages cannot be contained.  
Prevent further leakage or spillage if safe to do so.

### 3) Methods and material for containment and cleaning up

The product is immiscible with water and will spread on the water surface.  
Stop the flow of material, if this is without risk. Scrub the area with detergent and water.  
Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

### 4) Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## 7. Handling and storage

### 1) Precautions for safe handling

To avoid thermal decomposition, do not overheat. Avoid prolonged or repeated contact with skin.  
Wash hands after handling. Handle in accordance with good industrial hygiene and safety practices.  
Adequate ventilation should be provided so that exposure limits are not exceeded.

### 2) Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in closed original container in a dry place. Store away from incompatible materials (see Section 10 of the SDS).

### 3) Specific end use(s)

Not available.

## 8. Exposure controls/personal protection

### 1) Control parameters

#### Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001			
Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	MAK	5 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	20 mg/m <sup>3</sup>	Inhalable fraction.
		10 mg/m <sup>3</sup>	Respirable fraction.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work			
Components	Type	Value	Form

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Calcium carbonate (CAS 471-34-1)	TWA	1 fibers/cm <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
		10 mg/m <sup>3</sup>	

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	MAC	4 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Total dust.

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>	

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m <sup>3</sup>	Fine dust.
		10 mg/m <sup>3</sup>	

**Finland. Workplace Exposure Limits**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>	Dust.

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	6 mg/m <sup>3</sup>	

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>	Inhalable fraction.

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>	Inhalable fraction.
		1,25 mg/m <sup>3</sup>	Respirable fraction.

<b>Biological limit values</b>	: No biological exposure limits noted for the ingredient(s).
<b>Recommended monitoring procedures</b>	
<b>Additional exposure data</b>	: Occupational Exposure Limits are not relevant to the current physical form of the product.
<b>Recommended monitoring procedures</b>	: Follow standard monitoring procedures.
<b>Derived no effect levels (DNELs)</b>	: Not available.
<b>Predicted no effect concentrations (PNECs)</b>	: Not available.
<b>Exposure guidelines</b>	: Occupational Exposure Limits are not relevant to the current physical form of the product.

**2) Exposure controls**

<b>Appropriate engineering controls</b>	: Ensure adequate ventilation, especially in confined areas.
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### Individual protection measures, such as personal protective equipment

<b>General information</b>	: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<b>Eye / face protection</b>	: Not available.
<b>Skin protection</b>	
- Hand protection	: Suitable gloves can be recommended by the glove supplier.
- Other	: Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	: In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	: Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

Wash hands after handling. Handle in accordance with good industrial hygiene and safety practices.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

### 1) Information on basic physical and chemical properties

<b>Physical state</b>	: Solid.
<b>Form</b>	: Solid. Paste.
<b>Colour</b>	: Beige to Dark blonde.
<b>Odour</b>	: Characteristic.
<b>Melting point / freezing point</b>	: Not available.
<b>Boiling point or initial boiling point and boiling range</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Flash point</b>	: > 250,0 °C (> 482,0 °F) Open cup
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>pH</b>	: Not applicable.
<b>Kinematic viscosity</b>	: Not applicable.
<b>Kinematic viscosity temperature</b>	: 40 °C (104 °F)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	: Insoluble.
<b>Partition coefficient (n-octanol/water)</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 0,96
<b>Relative density temperature</b>	: 20 °C (68 °F)
<b>Particle characteristics</b>	: Not available.

### 2) Other information

#### Information with regard to physical hazard classes

No relevant additional information available.

#### Other safety characteristics

<b>Dropping point</b>	: > 165 °C (> 329 °F)
<b>Oxidising properties</b>	: Not oxidising.
<b>pH in aqueous solution</b>	: Not applicable.
<b>Viscosity</b>	: Not applicable.
<b>Viscosity temperature</b>	: 40 °C (104 °F)

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### 10. Stability and reactivity

#### 1) Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

#### 2) Chemical stability

Material is stable under normal conditions.

#### 3) Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 4) Conditions to avoid

Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.  
Eliminate all sources of ignition.

#### 5) Incompatible materials

Strong oxidising agents.

#### 6) Hazardous decomposition products

At thermal decomposition temperatures, carbon monoxide and carbon dioxide.  
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

### 11. Toxicological information

#### 1) Information on toxicological effects

##### Acute toxicity

: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhoea.

##### Skin corrosion/irritation

: Prolonged skin contact may cause temporary irritation.

##### Serious eye damage/eye irritation

: Direct contact with eyes may cause temporary irritation.

##### Respiratory sensitisation

: Not a respiratory sensitiser.

##### Skin sensitisation

: This product is not expected to cause skin sensitisation.

##### Germ cell mutagenicity

: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

##### Carcinogenicity

: Not available.

##### Reproductive toxicity

: This product is not expected to cause reproductive or developmental effects.

##### Specific target organ toxicity

: Not classified.

##### - single exposure

##### Specific target organ toxicity

: Not classified.

##### - repeated exposure

##### Aspiration hazard

: Not an aspiration hazard.

##### Mixture versus substance information

: No information available.

#### 2) Information on other hazards

##### Endocrine disrupting properties

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

##### Other information

: Not available.

### 12. Ecological information

#### 1) Toxicity

Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

#### 2) Persistence and degradability

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> 80% of the mixture consists of ingredient(s) : Readily biodegradable (OECD 301 B)  
 Water hazard class (WGK) [Germany] : 1. (calculated)

### 3) Bioaccumulative potential

**Bioconcentration factor (BCF)** : Not available.

### 4) Mobility in soil

No data available.

**Mobility in general** : The product is immiscible with water and will spread on the water surface.

### 5) Results of PBT and vPvB assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

### 6) Endocrine disrupting properties

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

### 7) Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

### 1) Waste treatment methods

<b>Residual waste</b>	: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	: Waste codes should be assigned by the user based on the application for which the product was used. Unused product : 16 03 06
<b>Disposal methods/information</b>	: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not discharge into drains, water courses or onto the ground.
<b>Special precautions</b>	: Dispose in accordance with all applicable regulations.

## 14. Transport information

<b>ADR</b>	: 14.1. - 14.6.: Not regulated as dangerous goods.
<b>IATA</b>	: 14.1. - 14.6.: Not regulated as dangerous goods.
<b>IMDG</b>	: 14.1. - 14.6.: Not regulated as dangerous goods.

### 7) Maritime transport in bulk according to IMO instruments

Not applicable.

## 15. Regulatory information

### 1) Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Retained direct EU regulations

##### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**  
 Not listed.

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**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

### Other regulations

: The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

### National regulations

: Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended

### Other regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

## 2) Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## 16. Other information

### List of abbreviations

<b>ADN</b>	European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
<b>ADR</b>	European Agreement concerning the International Carriage of Dangerous Goods by Road.
<b>AGW</b>	Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
<b>CAS</b>	Chemical Abstract Service.
<b>CEN</b>	European Committee for Standardization.
<b>IATA</b>	International Air Transport Association.
<b>IBC Code</b>	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.



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<b>IMDG</b>	International Maritime Dangerous Goods.
<b>MAC</b>	Maximum Allowed Concentration.
<b>MARPOL</b>	International Convention for the Prevention of Pollution from Ships.
<b>PBT</b>	Persistent, bioaccumulative and toxic.
<b>RID</b>	Regulations concerning the International Carriage of Dangerous Goods by Rail.
<b>STEL</b>	Short term exposure limit.
<b>TLV</b>	Threshold Limit Value.
<b>TWA</b>	Time Weighted Average.
<b>VLE</b>	Exposure Limit Value.
<b>VME</b>	Exposure Average Value.
<b>vPvB</b>	Very persistent and very bioaccumulative.

**References**

: Not available.

**Information on evaluation method leading to the classification of mixture**

: The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

**Full text of any H-statements not written out in full under Sections 2 to 15**

: H361f Suspected of damaging fertility.

**Revision information**

: None.

**Training information**

: Follow training instructions when handling this material.

2) The first creation date : 2020.03.31

3) The number of times, and the final revision date : Revision times 02

The final revision date : 28.07.2023

**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, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.*