

# Pulsarlube PL5 (High Temperature Grease)

## 1. MANUFACTURER INFORMATION

- 1) Product Name : Pulsarlube PL5 (High 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

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## 2. Hazard(s) identification

### 1) Classification of the substance or mixture

GHS US classification  
Not classified

### 2) GHS Label elements, including precautionary statements

GHS US labelling  
No labelling applicable

### 3) Other hazards which do not result in classification

No additional information available

### 4) Unknown acute toxicity (GHS US)

No additional information available

## 3. Composition/information on ingredients

### 1) Substances

Not applicable

### 2) Mixtures

Name	Product identifier	%	GHS US classification
Calcium carbonate	CAS-No.: 471-34-1	0.1 – 5	Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

## 4. First-aid measures

### 1) Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

### 2) Most important symptoms and effects (acute and delayed)

No additional information available

### 3) Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## 5. Fire-fighting measures

### 1) Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

### 2) Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 3) Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## 6. Accidental release measures

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

1-1) For non-emergency personnel

Emergency procedures : Ventilate spillage area.

1-2) For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 2) Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Mechanically recover the product

Other information : Dispose of materials or solid residues at an authorized site.

### 4) Reference to other sections

For further information refer to section 13.

**7. Handling and storage**

**1) Precautions for safe handling**

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store in a well-ventilated place. Keep cool.

**8. Exposure controls/personal protection**

**1) Control parameters**

<b>PL5</b>	
No additional information available	

<b>Calcium carbonate (471-34-1)</b>	
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)

**2) Appropriate engineering controls**

- Appropriate engineering controls : Ensure good ventilation of the work station
- Environmental exposure controls : Avoid release to the environment.

**3) Individual protection measures/Personal protective equipment**

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment

**4) Personal protective equipment symbol(s):**



**9. Physical and chemical properties**

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

Physical state	: Solid
Appearance	: Paste

Colour	: Beige
Odour	: Characteristic
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Ca. 0.92 at 20°C
Solubility	: Insoluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive limits	: Not applicable
Explosive properties	: No data available
Oxidising properties	: No data available

**2) Other information**

No additional information available

**10. Stability and reactivity**
**1) Reactivity**

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

**2) Chemical stability**

Stable under normal conditions.

**3) Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

**4) Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

**5) Incompatible materials**

No additional information available

**6) Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11. Toxicological information**
**1) Information on toxicological effects**

Acute toxicity (oral) : Not classified  
 Acute toxicity (dermal) : Not classified  
 Acute toxicity (inhalation) : Not classified

<b>Calcium carbonate (471-34-1)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LC50 Inhalation - Rat	> 3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

Skin corrosion/irritation : Not classified

<b>Calcium carbonate (471-34-1)</b>	
pH	8 – 9 (aqueous solution)

Serious eye damage/irritation : Not classified

<b>Calcium carbonate (471-34-1)</b>	
pH	8 – 9 (aqueous solution)

Respiratory or skin sensitisation : Not classified  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified  
 Reproductive toxicity : Not classified  
 STOT-single exposure : Not classified  
 STOT-repeated exposure : Not classified

<b>Calcium carbonate (471-34-1)</b>	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≥ 0.212 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified  
 Viscosity, kinematic : Not applicable

<b>Calcium carbonate (471-34-1)</b>	
Viscosity, kinematic	Not applicable (solid)

## 12. Ecological information

### 1) Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

<b>Calcium carbonate (471-34-1)</b>	
LC50 - Fish [1]	> 56000 mg/l Source: ECOTOX
EC50 - Crustacea [1]	> 100 % (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 14 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	22000 mg/l Source: Ecological Structure Activity Relationships
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

### 2) Persistence and degradability

<b>Calcium carbonate (471-34-1)</b>	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

### 3) Bioaccumulative potential

<b>Calcium carbonate (471-34-1)</b>	
BCF - Fish [1]	(no bioaccumulation)
Bioaccumulative potential	Not bioaccumulative.

### 4) Mobility in soil

<b>Calcium carbonate (471-34-1)</b>	
Mobility in soil	4.971 Source: Quantitative Structure Activity Relation
Surface tension	No data available (test not performed)
Ecology - soil	Low potential for adsorption in soil.

### 5) Other adverse effects

No additional information available

### 13. Disposal considerations

#### 1) Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### 14. Transport information

In accordance with DOT / TDG / IMDG / IATA

#### 1) UN number

Not regulated for transport

#### 2) UN proper shipping name

Proper Shipping Name (DOT) : Not applicable  
 Proper Shipping Name (TDG) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable

#### 3) Transport hazard class(es)

DOT : Not applicable  
 Transport hazard class(es) (DOT)  
 TDG : Not applicable  
 Transport hazard class(es) (TDG)  
 IMDG : Not applicable  
 Transport hazard class(es) (IMDG)  
 IATA : Not applicable  
 Transport hazard class(es) (IATA)

#### 4) Packing group

Packing group (DOT) : Not applicable  
 Packing group (TDG) : Not applicable  
 Packing group (IMDG) : Not applicable  
 Packing group (IATA) : Not applicable

#### 5) Environmental hazards

Other information : No supplementary information available.

#### 6) Special precautions for user

##### DOT

No data available

##### TDG

No data available

##### IMDG

No data available

##### IATA

No data available

**7) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**15. Regulatory information**
**1) US Federal regulations**

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Calcium carbonate	471-34-1	Present	Active	

**2) International regulations**
**CANADA**

Calcium carbonate (471-34-1)
Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

No additional information available

**National regulations**

Calcium carbonate (471-34-1)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

**3) US State regulations**

No additional information available

**16. OTHER INFORMATION**
**1) Full text of H-statements**

Full text of H-statements	
H402	Harmful to aquatic life

2) The first creation date : 2015.02.11

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

The final revision date : 2022.12.13

**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.*