

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name: BLASOLUBE® 512**
(EP-Lithium complex grease)
- **Article number:** 00512-01
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:**
For industrial use only
Lubricant
Lubricating grease
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
BLASER SWISSLUBE AG
Winterseistrasse 22
CH-3415 Hasle-Rüegsau
Switzerland
Tel.: +41 (0)34 460 01 01
Fax: +41 (0)34 460 01 00
E-mail: blaser@blaser.com
- **Further information obtainable from:**
Product Safety Department
E-mail: reach@blaser.com
- **1.4 Emergency telephone number:**
Switzerland: Abbreviated dialing 145 (or: ++41 (0)44/ 251 51 51) Toxicological Info-Centre CH-Zurich

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements**
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
Contains Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C₁₂-C₁₄-alkyl (branched). May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mineral oil grease with a lithium complex soap as thickener.

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· **Declarable, or hazardous components:**
CAS-no.

CAS: 12001-85-3 EINECS: 234-409-2 Reg.nr.: not determined, confidential	Naphthenic acid, zinc salt Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	>1,0-4,9%
CAS: 2215-35-2 EINECS: 218-679-9 Reg.nr.: 01-2119953275-34-0000	Zinc dialkyl-dithiophosphate Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	< 1,00%
931-384-6 Reg.nr.: 01-2119493620-38-0000	Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C ₁₂ -C ₁₄ -alkyl (branched) Flam. Liq. 3, H226; Eye Dam. 1, H318; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317	< 1,00%

· **Additional information:**

Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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- Observe the general safety regulations when handling chemicals.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Optimal storage temperature between +5 °C and +40 °C.
Duration of storage: In original container, at least 3 years.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values at the workplace:** TLV value (oil mist) CH: 5 mg/m³
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.
Gloves must be inspected prior to use. Replace when worn!
Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.
- **Penetration time of glove material**
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Eye protector with side protection (framed eyeglasses) EN 166.
- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Pasty
Colour:	Yellow-brown
Odour:	Mineral-oil-like
Odour threshold:	Not determined.
- **pH-value:** Not applicable.

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· Change in condition:	
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	> 300 °C (DIN 51751 / ASTM D86)
Drip point:	> 260 °C (ISO 2176 / ASTM D566)
Pour point:	> 260 °C (ISO 2176 / ASTM D566)
Pour point:	Not applicable
· Flash point:	> 150 °C (ISO 2592 / ASTM D92)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	> 350 °C (DIN 51794 / ASTM E659)
· Decomposition temperature:	> 350 °C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits (@1013 mbar):	general values for mineral oil, therefore not product specific
· Lower:	Not determined.
· Upper:	Not determined.
· Oxidising properties	Not applicable.
· Vapour pressure:	Not applicable.
· Density at 20 °C:	0,95 g/cm ³ (DIN 51757 / ASTM D1217)
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Penetration	265-295 mm/10 @ 25 °C. (ISO 2137 / ASTM D217)
· 9.2 Other information:	safety relevant data, which has to be considered as product specifications.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** None known if used as directed.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
 - Carbon monoxide and carbon dioxide
 - Phosphorus compounds
 - Sulphur oxides (SO_x)
 - Nitrogen oxides (NO_x)
 - Metal oxides

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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- **LD/LC50 values relevant for classification:**
- > 2000 - < 5000 mg / kg (oral, rat)
- > 5,100 mg/m³ 4h (inhalation, rat)

Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C₁₂-C₁₄-alkyl (branched)

Oral	LD50	500 mg/kg (ATE)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Harmful to aquatic organisms
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 - **European waste catalogue**
- | | |
|-----------|----------------------|
| 12 01 12* | spent waxes and fats |
|-----------|----------------------|
- **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void

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· 14.2 UN proper shipping name	
· ADR	Void
· ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· IATA	IATA Dangerous Goods Regulation (DGR) 56th Edition 2015
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008:** CLP/GHS label elements are issued under section 2.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
This preparation does not contain any SVHC ("Substances of Very High Concern")
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Regulations / approvals / listings:

Information on REACH registration numbers in section 3:

In case of lack of REACH registration numbers on mentioned hazardous substances at the end of 2010, then these numbers will be known and indicated only in section 3 within its tonnage band for registration, after the end of 2013, respectively by the end of 2018, or are exempt from the REACH regulation (e.g. polymers).

RoHS:

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The product is compliant with European Directives 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.

The following substances ARE NOT contained:

Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and / or polybrominated biphenyls (PBB), lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr⁶⁺-compounds.

• **IP346:**

The contained refined mineral oils are exempt of labelling.

The content of polycyclic aromatic hydrocarbons (PCA) according to IP346 is < 3% (DMSO-extract).

• **Department issuing SDS:** Product Stewardship

• **Contact:** Dr. Mosimann + Mr. Frei

• **Editor's notice:**

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

• **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

RoHS: Restriction of Hazardous Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

• *** Data compared to the previous version altered.**

The asterisk (*) on the left side indicate the respective changes from the previous version.