Dear simalube Customer,

We hereby confirm that the automatic lubricators simalube and simalube multipoint with the designation SL24 are filled with Blaser 04811-01 lubricant. The Material Safety Data Sheet (MSDS) for this lubricant is provided on the following pages. Please visit www.simatec.com for further technical data regarding this lubricant and simatec automatic lubricators.

Werter simalube Kunde


Cher client simalube

Nous certifions que les graissiers automatiques simalube et simalube multipoint appelés SL24 sont remplis avec le lubrifiant Blaser 04811-01. La fiche de données de sécurité de ce lubrifiant peut être trouvé dans les pages suivantes. Concernant les données techniques du lubrifiant tout comme les graissiers automatiques simalube, vous allez trouver ces détails sous le lien suivant : www.simatec.com

Estimado cliente de simalube

Por la presente certificamos que los lubricadores automáticos simalube y simalube multipoint con la designación SL24, están rellenados con el lubricante Blaser 04811-01. La ficha de datos de seguridad de este lubricante Usted pueden encontrar en las siguientes páginas. Para especificaciones técnicas del lubricante y de los lubricadores automáticos simalube ver: www.simatec.com

Caro cliente simalube

Con la presente confermiamo che i lubrificatori automatici simalube e simalube multipoint con la designazione SL24 sono riempiti con lubrificante Blaser 04811-01. La scheda dati di sicurezza per questo lubrificante è riportato sulle seguenti pagine. I dati tecnici del lubrificante e dei lubrificatori automatici sono disponibili sul sito: www.simatec.com

01.10.2016 / simatec ag, Wangen a. Aare, Switzerland
SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - Trade name: Blasolube® Lithium Complex Grease EPAQ 2
  - Article number: 04811-01
- **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: sds@blaser.com
  - **1.4 Emergency telephone number:**
    Toxicological information Switzerland:
    24-h-Emergency number: 145 (from abroad: +41 44 251 51 51)
    Information: +41 44 251 66 66
    For advice on chemical emergencies, spillages, fires or exposures: +44 1235 239670 (24h/7d)

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:**
    EUH208 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:**
    Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)
Safety Data Sheet
according to 1907/2006/EC, Article 31 and 830/2015/EC

Printing date: 21.03.2017
Version number: 5
Revision: 21.03.2017

Trade name: Blasolube® Lithium Complex Grease EPAQ 2

Mineral oil grease with a lithium complex soap as thickener.

· Declarable, or hazardous components:
  
<table>
<thead>
<tr>
<th>CAS-no.</th>
<th>Name of component</th>
<th>Reg.nr.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 12001-85-3</td>
<td>Naphthenic acid, zinc salt</td>
<td>not determined, confidential</td>
<td>&gt;1.0-4.9%</td>
</tr>
<tr>
<td>EINECS: 234-409-2</td>
<td>Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC number: 931-384-6</td>
<td>Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C₁₂-C₁₄-alkyl (branched)</td>
<td>01-2119493620-38-0000</td>
<td>&lt; 1.00%</td>
</tr>
<tr>
<td>Reg.nr.:</td>
<td>Eye Dam. 1, H318; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

· 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:
  · 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.
  Observe the general safety regulations when handling chemicals.

· Information about fire - and explosion protection
  No special measures required.
Trade name: Blasolube® Lithium Complex Grease EPAQ 2

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 0 °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: Light yellow
      - Odour: Mineral-oil-like
      - Odour threshold: Not determined.
    - **pH-value:** Not applicable.
  - **Change in condition:**
    - Melting point/freezing point: Not applicable
    - Initial boiling point and boiling range: >300 °C (DIN 51751 / ASTM D86)
    - Drip point: >280 °C (ISO 2176 / ASTM D566)
Trade name: Blasolube® Lithium Complex Grease EPAQ 2

(Contd. of page 3)

Pour point: Not determined
- Flash point: >150 °C (ISO 2592 / ASTM D92)
  (Value for the processed mineral-, ester- or synthetic oil)
- Flammability (solid, gas): Not applicable.
- Ignition temperature: >350 °C (DIN 51794 / ASTM E659)
- Decomposition temperature: >350 °C
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product does not present an explosion hazard.
- Explosion limits (@1013 mbar):
  - Lower: 0.6 Vol %
  - Upper: 6.5 Vol %
- Density at 20 °C: 0.95 g/cm³ (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)
    NLGI class: 2
- VOC (CH): 0.00 %
- 9.2 Other information: safety relevant data, which has to be considered as product specifications.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 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
  Nitrogen oxides (NOx)

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:
  - > 2000 - < 5000 mg / kg (oral, rat)
  - > 5,100 mg/m³ 4h (inhalation, rat)
  * pure substance
- 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)
- 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.

(Contd. on page 5)
Trade name: Blasolube® Lithium Complex Grease EPAQ 2

- 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: 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 Not regulated
- 14.2 UN proper shipping name
  - ADR Not regulated
  - ADN, IMDG, IATA Not regulated
- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA
  - Class Not regulated
- 14.4 Packing group
  - ADR, IMDG, IATA Not regulated
- 14.5 Environmental hazards:
  - Marine pollutant: No

(Contd. of page 6)
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.

C PID-no. (CH): 304293-86

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:
The following substances ARE NOT contained:
Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and/or polybrominated biphenyls (PBB), Bis(2-ethylhexyl)phthalate (DEHP), Benzybutylphthalate (BBP), Dibutylphthalate (DBP), Diisobutylphthalate (DIBP);
lead or its compounds, cadmium or its compounds, mercury or its 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).

TSE/BSE:
This product adheres to the standards of TSE/BSE-free products, according to European Community directives 93/42/EEC and 2003/32/EC.
Materials and/or synthetically modified materials which are of animal origin from bovine, ovine, goats, cats, dogs, deer, elk and/or mink, are NOT included in this product.
This product is entirely free from latex containing materials.

Department issuing SDS: Product Stewardship
Trade name: Blasolube® Lithium Complex Grease EPAQ 2

- **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
- ATE: Acute Toxicity Estimate
- 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.