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MADE IN
BELGIUM

GREASES



LIQUID TECHNOLOGY

COMPOSITION OF GREASES

| Oil | Thickening agent | Additives |
|------------|--|---|
| 75% to 90% | 5% to 20% | 0 to 10% |
| | Simple soap <i>(Lithium, calcium, aluminium, etc.)</i> Mixed soap <i>(Lithium-calcium, calcium-lithium)</i> Complex soap <i>(Lithium, calcium, aluminium)</i> Inorganic <i>(Bentonite, graphite, etc.)</i> Polyurea | Anti-oxidation Anti-rust Anti-wear Extreme pressure (EP) Friction-reducing additive Metal powders Colourants |



OVERVIEW OF GREASES MANUFACTURED BY UNIL LUBRICANTS

| | | | 00 | 0 | 1 | 2 | 3 | 4 |
|------------------|--------------|--------------------|-------------|-------------|-------------|--|----------------------------|---|
| Thickening agent | Simple soap | Li | Grease EP/R | Grease EP/R | Grease EP/R | Grease EP/R | Grease EP/R Molith EP 2 | |
| | | Ca-sulphona- te | | | | ESCA Grease CA 2 400 | | |
| | Mixed soap | Li-Ca | | Caliopal | | Caliopal Supergrease 200 Supergrease 350 | | |
| | | Ca-Na | | | | | | |
| | Complex soap | Li-complex | | | | Alba + Thermoplex | | |
| | | Ca-complex | Polyfood | | | Polyfood | | |
| | | Al-complex | | | | Grease AL/TF 2 ESCA Grease P AL | | |
| | Non soap | Bentonite | | | | Grease HT 300 Copper Anti-Seize Alimenta | | |
| | | Polyurea | | | | Polygrease | | |

Colored spaces represent the colors of the greases.

GENERAL LUBRICATION

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|--|--|------------------|-----------------|----------|-------------------------|-----------------|-------------|-------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| Grease EP/R | All-round, extreme pressure grease, ideal for standardising multiple lubrication applications. | Lithium | 160 | Mineral | 60 | Amber | 00 | -30/+120 | XX | XX | XX | XX |
| | | | 160 | | 64 | | 0 | -30/+120 | XX | XX | XX | XX |
| | | | 190 | | 130 | | 1 | -20/+130 | XX | XX | XX | XX |
| | | | 190 | | 120 | | 2 | -20/+130 | XX | XX | XX | XX |
| | | | 190 | | 130 | | 3 | -20/+130 | XX | XX | XX | XX |
| Supergrease 200 Supergrease 350 | Multi-purpose, highly adherent, and water resistant. Can withstand high pressures, and temperature variations. This grease is widely used in industry and in public works. | Lithium-Calcium | 180 | Mineral | 310 | Green Blue | 2 | -20/+140 | XXX | XXX | XXX | XXX |
| | | | | | 400 | | | -20/+120 | XXX | XXX | XXX | XXX |
| Caliopal | Ultra-pressure grease for plain bearings, slow-rotating roller bearings (500 - 750 r/min) and other components with heavy loads. This grease has an exceptional longevity. | Lithium-Calcium | 180 | Mineral | 465 420 | Brown | 0 2 | -20/+120 | XXX XXX | XXX XXX | XXX XXX | XX XX |

GENERAL LUBRICATION

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|----------------------|--|------------------|-----------------|-----------|-------------------------|-----------------|-------------|-------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| Grease 182 DS | Ideal general lubricating grease for lubricating components with a moderate load, such as articulations, bearings, shafts, pumps, cardan shafts, etc. Excellent bonding capacity and good lubricating effect. Easy to pump with various pressurised lubricating devices. | Lithium | 190 | Mineral | 120 | Yellow/beige | 2 | -20/+140 | XX | X | XX | XX |
| Synbio Grease | Biodegradable grease based on plant oils and synthetic esters. Suitable for the lubrication of cardan shafts, axles, couplings, bearings in hydraulic systems and chains that come into contact with water. This environmentally friendly lubricating grease is recommended for lubrication in the agriculture and forestry, and industrial sectors. | Lithium-Calcium | 160 | Synthetic | 100 | green | 2 | -20/+100 | XX | XXX | XX | XXX |
| Grease Ultra | Multi-purpose grease for general usage. This spray is ideal for lubricating areas that are difficult to access and for machine components such as cables, springs, hinges, guideways, etc. | Lithium | 190 | Mineral | 180 | Yellow | 2 | -20/+140 | XX | XXX | XX | XXX |

LONG-TERM LUBRICATION

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|-------------------|--|------------------|-----------------|-----------------|-------------------------|-----------------|-------------|-----------------------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| Alba + | Grease based on PTFE, intended for bearings subjected to heavy loads (limit lubrication) and telescopic guideways. | Lithium complex | 270 | Mineral | 210 | White | 2 | -30/+140 | XXX | X | XXX | XX |
| Thermoplex | Universal grease for demanding applications involving articulations, plain bearings and roller bearings that are subjected to heavy loads. Ideal for wheel bearings on lorries and systems with central lubrication. | Lithium complex | 250 | Mineral | 210 | Green | 2 | -30/+150 | XXX | XX | XX | XXX |
| Polygrease | Polygrease is a high-tech grease with a polyurea thickener and a fully synthetic base oil. It is used for a long lubrication interval for bearings at both extremely low and extremely high temperatures. | Polyurea | 240 | Synthetic ester | 100 | Pale yellow | 2 | -40/+180 | XXX | XXX | XXX | XXX |
| Synthebis | Lubricating grease with exceptionally high stability and excellent water resistance. The additive package based on bismuth technology was specially developed to deliver top performance under extremely demanding conditions. | Lithium complex | >270 | Semi-synthetic | 560 | Orange | 2 | -20/+140 (peaks up to +220) | XXX | XXX | XXX | XXX |

LUBRICATION FOR SPECIFIC APPLICATIONS

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|---|---|-----------------------------|-----------------|----------|-------------------------|-----------------|-------------|-------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| Molith EP | Grease with molybdenum disulphide and graphite for machine parts that are consistently subjected to heavy loads and/or shocks (earth moving and industrial applications) | Lithium | 190 | Mineral | 95 | Black | 2 | -20/+140 | XX | XX | XXX | XX |
| Grease HT 300 | Grease based on graphite for loaded bearings subjected to high temperatures (200 to 300°C). | Bentonite (non-soap) | None | Mineral | 460 | Black | 2 | -15/+150 | XXX | X | XXX | XX |
| Copper Anti-Seize | Organo-metal complex with an extremely wide range of potential applications. Lubricant and anti-grip agent for components that are subjected to exceptional pressures or high temperatures. | Copper (non-soap) | None | Mineral | 100 | Copper | 2 | -20/+200 | XX | XX | XX | XX |
| Compound | Calcium grease, highly adhesive, and particularly suitable for the lubrication of axles and articulations. | Calcium | 95 | Mineral | 100 | Green | 1 | -20/+60 | XX | XXX | XX | XX |
| Walzerit 3V 3 | Special grease with a remarkable shear resistance and resistance to water wash. It has a high lubricating capacity and is highly adhesive. | 12-lithium hydroxy stearate | 185 | Mineral | 120 | Yellow | 2-3 | -25/+140 | XXX | XXX | XXX | XXX |
| Zahlit LM 22 Zahlit O Zahlit DL 14 | Fractions of crude oil that separate due to their exceptional bonding strength and their EP properties arising from their inherent, naturally bonded sulphur. These oils are resistant to water wash. | / | None | n.a. | 325 1550 4300 | Grey | n.a. | n.a. | XXX | XXX | XXX | XX |

LUBRICATION FOR THE FOOD INDUSTRY

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|-------------------------|---|-------------------|-----------------|-------------------|-------------------------|-----------------|-------------|-------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| Polyfood | Food grade grease based on white oil. Ideal for the lubrication of bearings and guideways in ovens, conveyor belts, etc., where occasional contact with food products may occur. | Calcium complex | 200 265 | White mineral oil | 180 | White/ivory | 00 2 | -20/+150 | XX | XXX | XX | XXX |
| Alimenta | Bentonite-based grease. Designed for the food industry where there may be occasional contact with food products. | Bentonite | None | White mineral oil | 80 | Transparent | 2 | -20/+120 | XX | XX | XX | XX |
| Grease AL TF 2 | GREASE AL TF is a widely deployable aluminium complex grease with exceptional anti-wear and anti-corrosion properties. | Aluminium complex | 230 | White mineral oil | 180 | White | 2 | -15/+120 | XX | X | X | XX |
| ESCA Grease P AL | ESCA Grease P AL is designed for a wide range of applications, including extreme temperatures, wet or saturated environments, heavy-duty applications and for places where dust or other contaminants are present. With Teflon and NSF H1 approved. | Aluminium complex | >250 | PAO | 100 | White | 2 | -40/+180 | XXX | X | XX | XX |

LUBRICATION FOR THE FOOD INDUSTRY

| Name of product | Applications | Composition | | | | Characteristics | | | | | | |
|-----------------------------|---|---------------------|-----------------|-------------------|-------------------------|-----------------|-------------|-------------|----------------------|---------------------|---------------------------|----------------------|
| | | Thickening agent | | Base oil | | Colour | Consistency | Temperature | Mechanical stability | Resistance to water | Extreme pressure capacity | Corrosion resistance |
| | | Soap base | Thaw point (°C) | Nature | Viscosity (cSt at 40°C) | | | | | | | |
| ESCA Grease CA 2 400 | Calcium sulphonate grease based on PAO. This grease has excellent resistance to corrosion and is extremely water resistant. Suitable for occasional contact with food products. | Calcium sulpho-nate | >250 | PAO | 400 | Beige | 2 | -30/+175 | XXX | XX | XXX | XXX |
| ESCA Food Grease | White, multi-purpose grease in spray form. Suitable for the lubrication of chains, guideways, hinges, various articulations, and anywhere that there is a possibility of occasional contact with the food chain. | Aluminium complex | 240 | White mineral oil | 140 | White | 2 | -20/+120 | XX | XX | XX | XX |
| Grease VA | Vaseline grease that meets the various European directives for pharmacies. It is particularly recommended for the lubrication of various types of equipment that comes into contact with food products, and where pharmaceutical petroleum jelly is required. | Vaseline (non-soap) | 52-59 | Vaseline | n.a. | White | 4 | -10/+ 50 | XX | XXX | X | XX |

| LEGEND: | | | | | | | | | | | | | | |
|--------------------|---|-------------------|--------|---------|--------------------|-----------------|----------------|---------|--------------------|-----------------|-----------|--------|--------------------|--------|
| | | Aluminium Complex | Barium | Calcium | Calcium 12-Hydroxy | Calcium Complex | Clay (Bentone) | Lithium | Lithium 12-Hydroxy | Lithium Complex | Polyurea* | Sodium | Calcium Sulphonate | Silica |
| Al-Complex | Grease AL / TF 2 ESCA Grease P AL ESCA Food Grease | ↘ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ■ |
| | Polyfood Caliopal Supergrease 200 Supergrease 350 Compound Synbio Grease | ◆ | ◆ | ◆ | ● | ↘ | ◆ | ◆ | ◆ | ■ | ■ | ◆ | ■ | ◆ |
| Clay (Bentone) | Grease HT 300 Copper Anti-Seize Alimenta | ◆ | ◆ | ■ | ■ | ◆ | ↘ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ■ |
| | Grease EPR Molith EP 2 Grease 182 DS Grease Ultra Walzerit 3 V3 | ◆ | ◆ | ■ | ■ | ◆ | ◆ | ↘ | ■ | ■ | ◆ | ◆ | ■ | ■ |
| Lithium Complex | Alba + Thermoplex Synthebis | ■ | ◆ | ■ | ■ | ■ | ◆ | ■ | ■ | ↘ | ◆ | ◆ | ■ | ■ |
| Polyurea | Polygrease | ◆ | ◆ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | * | ◆ | ◆ | ◆ |
| Calcium Sulphonate | ESCA Grease CA 2 400 | ◆ | ● | N/A | N/A | ■ | ◆ | ■ | ■ | ■ | ◆ | ◆ | ↘ | N/A |

QUALITY GUARANTEE

Unil Lubricants works on an exclusive basis with an extensive and high-performance laboratory. This laboratory is also commercially active in the field of condition monitoring. In this way, we can also offer solutions through proactive maintenance that can drastically extend the lifespan of your machine.

Various quality controls

All Unil lubricants are subjected to extensive quality controls both before, during and after production. The production manager takes a sample of the delivered product upon receipt of the base oils and other raw materials. The raw materials are only accepted and taken into production if they comply with all the predefined specifications.

After the production of a certain product, a sample is taken from the production tank. This sample undergoes a similar number of tests as the first sample, where it is checked for viscosity at 40° C and 100° C, colour, viscosity index, but also for water content and content of phosphorus, zinc, magnesium, calcium and sulphur. In addition, additional critical tests may be imposed on products developed for specific applications.

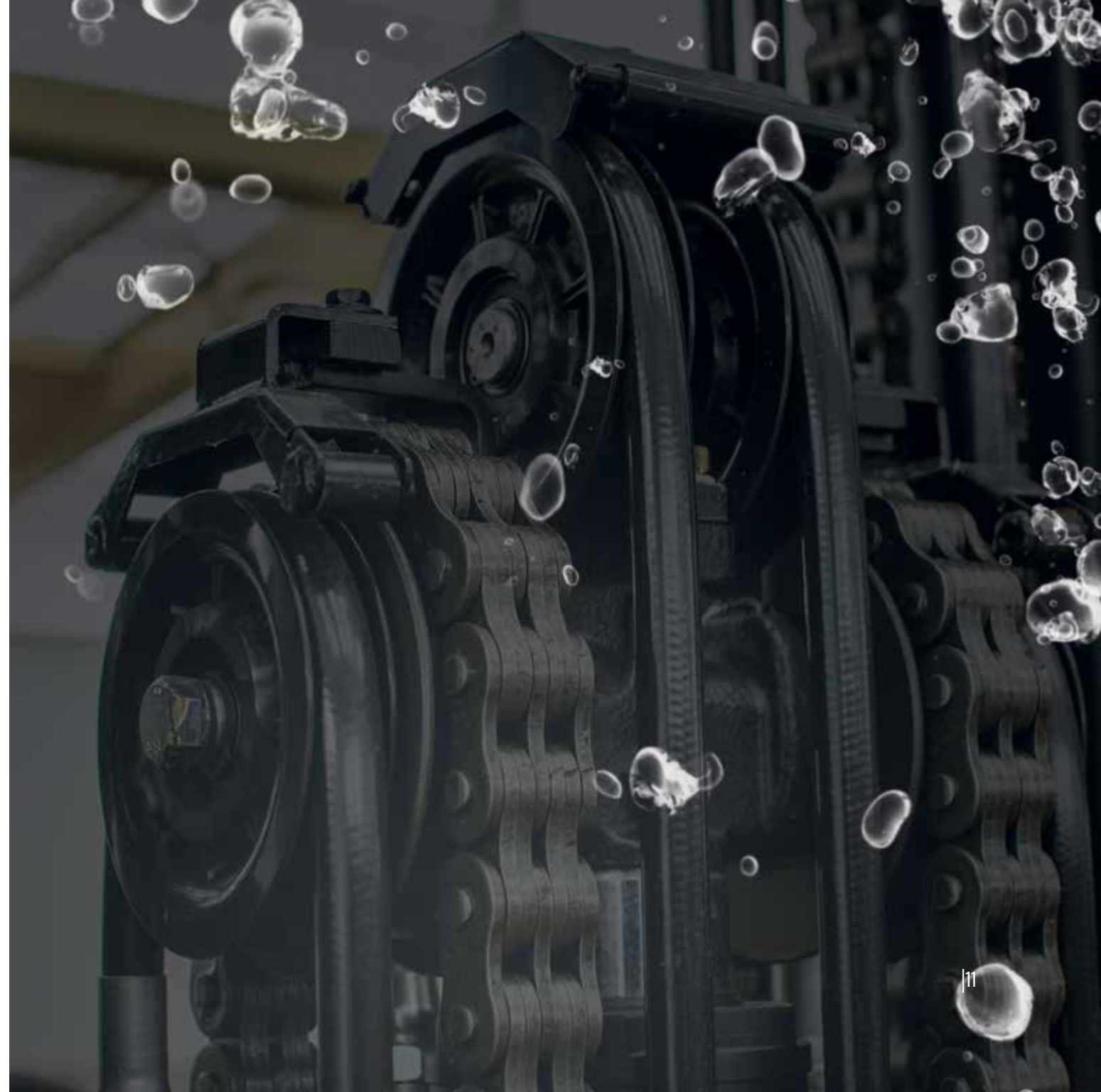
After filling the products in smaller packages such as an IBC or a barrel, a third sample is taken. This sample undergoes the previous tests again to make sure that the quality from raw material to finished product is maintained.

Extra service

Customers of Unil Lubricants can also make use of the expertise of the laboratory services. By performing regular analyses, you will be able to carry out proactive maintenance. A proactive maintenance method focuses on the causes of machine wear and tear and defects. This strategy allows considerable savings in terms of machine maintenance, since it is possible to intervene before an issue or defect in the machine is visible. In this way, we can extend the service life of mechanical machines by up to 20%.

This not only ensures that you get the best product for your machine, but also that your machine can continue to run undisturbed with the best care.

If you would like to know more about our lab activities and its analyses, please contact your representative.





LIQUID TECHNOLOGY

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