

# LUBRICANTS FOR GEARBOXES



***LIQUID TECHNOLOGY***



OVERVIEW

1 Mineral lubricants	p. 04
2 Synthetic lubricants	p. 05
3 Food grade lubricants	p. 07
4 Greases	p. 08
5 Special lubricants	p. 09
6 Sprays	p. 10
Quality guarantee	p. 12



1 MINERAL LUBRICANTS FOR GEARBOXES

Product and applications	Specifications	Standards	Viscosities	Base oil
<b>Gear SP</b> Lubricant that is available in all standard viscosities. This oil is ideal for lubricating clutches and transmission chains in an oil bath, but also for all industrial gearboxes, reducers and bearings with medium or heavy loads over a wide speed range.	<ul style="list-style-type: none"><li>High level of protection against rust and corrosion</li><li>Good stability during use</li><li>Does not corrode bronze components</li><li>Excellent detergent properties</li><li>Low pour point</li></ul>	AGMA 9500-E02 API GL4 DAVID BROWN S1.53.101 DIN 51502 CLP EP DIN 51517 Teil 3 ISO 6743 CKD US STEEL 224	46 - 68 - 100 - 150 - 220 - 320 - 460 - 680	Mineral

2 SYNTHETIC LUBRICANTS FOR GEARBOXES

Product and applications	Specifications	Standards	Viscosities	Base oil
<b>Syndus SP</b> "Long life" lubricant suitable for all industrial gearboxes and worm gear transmissions. Ideal for use with bearings with average or heavy loads at a wide range of temperatures and speed margins.	<ul style="list-style-type: none"><li>Enhanced extreme pressure properties</li><li>Extremely good protection against rust and corrosion</li><li>Extremely high and very stable viscosity index</li><li>Excellent resistance to oxidation</li><li>Good de-emulsifying capacity</li><li>No foaming</li></ul>	AGMA 9500-E02 ISO 6743/6 cat. CKD/CKT US STEEL 224 DIN 51517 Teil 3 DAVID BROWN RADICON/TEXTRON Type H	46 - 150 - 220 - 460	Synthetic PAO

Product and applications	Specifications	Standards	Viscosities	Base oil
<b>Syndus RE</b> Lubricant based on polyglycol (PAG) with excellent thermal stability. Suitable for lubricating industrial gearboxes that operate at high temperatures in the steel industry, rollers, calenders, etc. Also suitable for lubrication for life of small cogs and the lubrication of worm and worm-wheel transmissions.	<ul style="list-style-type: none"><li>Extremely good thermal stability which allows the oil to be used continuously up to 200 °C</li><li>Extremely low tendency for sludge formation</li><li>High viscosity index and low pour point which guarantee effective lubrication in a broad temperature range</li><li>High extreme pressure and anti-wear properties limit wear and tear to the equipment</li></ul>	ISO 6743 CKS DIN 51517 4.3	150 - 220 - 460	Synthetic PAG





3 **FOOD GRADE** LUBRICANTS FOR GEARBOXES

Product and applications	Specifications	Standards	Viscosities	Base oil
<p><b>ESCA Gear P</b></p> <p>High performance lubricant for gearboxes based on PAO. Meets the requirements of the FDA 21 CFR 178.3570, and NSF H1 registered for processes where occasional contact with food may occur.</p> <p>It was developed using the latest additives which guarantee the exceptional extreme pressure and load characteristics required in gearbox systems.</p>	<ul style="list-style-type: none"><li>Resistant against applications with high loads</li><li>Good heat transfer</li><li>No black carbon or sticky deposits at high temperatures</li><li>Increased oxidative stability</li><li>Extends the working life of the equipment</li></ul>	<p>NSF H1 DIN 51517/3 CLP ISO 12925-1 CKT ISO 6743/6 -L-CKT KOSHER HALAL</p>	<p>150 - 220 - 320 - 460 - 680</p>	<p>Synthetic PAO</p>
<p><b>ESCA Gear PG</b></p> <p>Oil based on polyglycol (PAG) that was primarily designed for applications with worm gear wheels and/or chains in the food and feed industry.</p> <p>Meets the requirements of the FDA 21 CFR 178.3570, and NSF H1 registered for processes where occasional contact with food may occur.</p>	<ul style="list-style-type: none"><li>Extended oil-change intervals</li><li>Enhanced anti-rust and anti-oxidation properties</li><li>Extremely good resistance against shear resistance</li></ul>	<p>NSF H1 HALAL KOSHER</p>	<p>150 - 220</p>	<p>Synthetic PAG</p>

4 GREASES FOR GEARBOXES

Product and applications	Specifications	Viscosities	Base oil
<b>Syndus GR</b> This grease was created for lubricating gear cases at high speeds (motor reducers, electric tools, etc.) and centralised automated lubrication systems. (This product is only available on request.)	<ul style="list-style-type: none"><li>• Exceptional resistance to oxidation</li><li>• Good capacity to bond to metal surfaces</li><li>• Insoluble in water</li><li>• Does not seep through untight seals</li></ul>	000 / 00	Synthetic
<b>Grease EP/R</b> Grease EP/R greases are “extreme pressure” greases that offer high levels of performance for any use (articulations, cardan shafts, axles, pumps, bearings, etc.) and are particularly suitable for high temperatures and very high loads.  Grade 00 to 1 are particularly suitable for reduction gears, continuous variable transmission systems, centralised lubrication systems and gearboxes.	<ul style="list-style-type: none"><li>• Multifunctional</li><li>• Broad temperature range</li><li>• Good adhesive capacity</li><li>• Good extreme pressure properties</li><li>• Good pumpability</li><li>• Good resistance to water</li></ul>	00 / 0 / 1 / 2 / 3	Mineral

5 SPECIAL LUBRICANTS FOR GEARBOXES

Product and applications	Specifications	Viscosities	Base oil
<b>Zahlit LM 22</b> This lubricant is ideal for lubricating gearboxes moderate power outputs and for bearings with ring lubrication that undergo heating due to ambient heat.	<ul style="list-style-type: none"><li>• Extremely high EP capacity</li><li>• Good adhesive capacity</li><li>• Water-repellent</li><li>• Anti-corrosion action</li></ul>	320	Mineral
<b>Zahlit O</b> This oil has an extremely high viscosity and can be best used as a service material for gearboxes, drive wheel boxes up to 20 m/s (peripheral speed) and transmission cages. It is also suitable for the maintenance of steel cables, bearings with bearing shells, chains, ball cage bearings, guideways and tracks.  Furthermore, this oil provides and additional anti-rust layer.	<ul style="list-style-type: none"><li>• Extremely high EP capacity</li><li>• Good adhesive capacity</li><li>• Water-repellent</li><li>• Anti-corrosion action</li></ul>	1500	Mineral

6 SPRAYS

Product and applications	Specifications	Viscosities	Base oil
<b>Black G</b> Lubrication for all open cogs, chains and steel cables, except in dusty or particularly dirty environments.  Special oil that forms an adhesive film containing graphite with an extremely high viscosity.	<ul style="list-style-type: none"><li>• Provides a plastic, semi-dry film that resists extremely high pressure</li><li>• Exceptional adhesive capacity</li><li>• Impermeable to water</li><li>• Anti-corrosion action</li><li>• Resistance to acidic or saline solutions</li><li>• Safe lubrication at all temperatures</li></ul>	1	Mineral

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.



Bergensesteenweg 713 | BE-1600 Sint-Pieters-Leeuw  
Tel. +32 (0)2 365 02 00 | Fax. +32 (0)2 360 01 12  
[info@unil.com](mailto:info@unil.com) | [www.unil.com](http://www.unil.com) | [@UnilLubricants](https://www.instagram.com/UnilLubricants)