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# LUBRICANTS FOR AGRICULTURE, HORTICULTURE AND PUBLIC WORKS

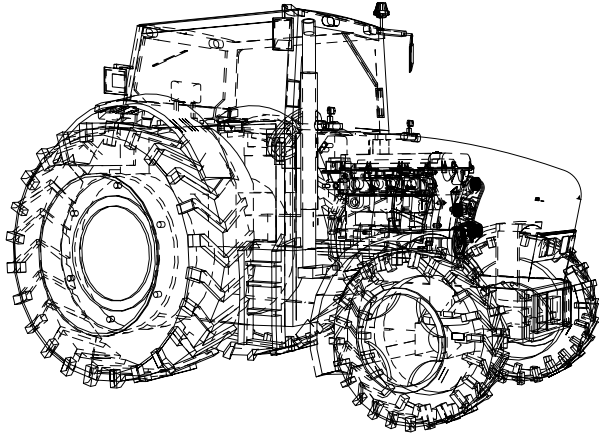


***LIQUID TECHNOLOGY***

## **OVERVIEW**

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## LUBRICANTS FOR AGRICULTURAL AND PUBLIC WORKS VEHICLES



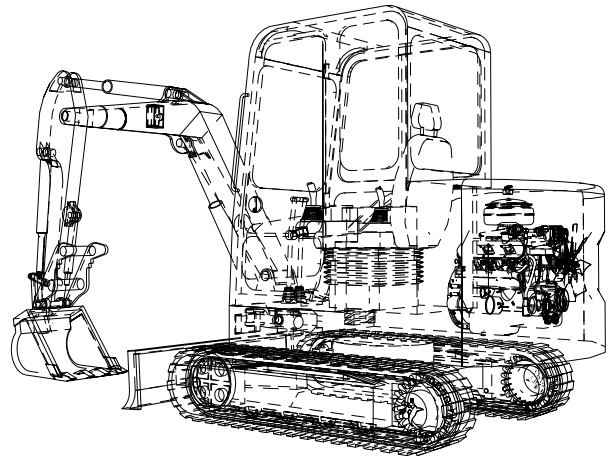
The latest technological developments in agricultural and public works vehicles have resulted in higher-performance engines in recent years, with lower environmental impact due to lower fuel consumption. Together with the every-increasingly stringent standards imposed by manufacturers of engines and transmissions, these developments go hand in hand with an evolution in the use of lubricants in agricultural vehicles.

### From STOU and UTTO to specialised lubrication

In line with tradition, STOU (Super Tractor Universal Oil) was often used for the lubrication of these vehicles. This universal oil was used for the lubrication of the engine, the transmission and all hydraulic systems. The reason for this was the limiting of the number of oils used. Besides sustainability, increased productivity and lower maintenance costs, much more attention is being paid

today to lower fuel consumption and lower emissions by modern engines. A single multi-purpose oil is no longer sufficient for the modern EURO V and EURO VI engines. Two different products are now required: a specific engine oil and a second oil for the hydraulic system, the brakes and the transmission (a UTTO - Universal Transmission Tractor Oil). The higher quality of the engine oils offers the required performance and helps comply with the requirements set out in the latest emission standards. The aim is also to achieve good fluidity at low temperatures and equally good performance at high temperatures.

With the latest developments in transmission technology in agricultural vehicles (often fitted with front and/or rear differential), manufacturers are facing increasingly stringent lubrication requirements. The use of a STOU or UTTO for multiple systems is therefore less common. That's why Unil Lubricants has a whole range of specialised oils for every part of your machine.



## ENGINE OIL

Product and description	Standards	Viscosities
<p><b>Pallas 725</b>            PALLAS 725 is a high performance oil designed for the most modern diesel engines operating in the harshest conditions of use and loading, whether in agriculture, transport or public works.</p> <p>PALLAS 725 has been specially developed to comply with the technological development of low emission engines EURO 4, EURO 5 and EURO 6 and in particular for engines including a particulate filter.</p> <p>The lower viscosity of PALLAS 725 provides optimum fuel economy (of approximately 1 litre per 100 km) compared to an SAE 15W40 and 15W30 oil.</p>	<p>ACEA E7-04-Issue-2-(2007) - ACEA E9-08 issue 2 - API CJ-4/SN - CAT ECF 1a/2/3 - Cummins CES 20081 - Detroit Diesel DDC 93K218 - Deutz DQC III-05 - Mack EO-0 Premium Plus - MAN 3575 - MB 228.31 - MTU Type 2.1 - RVI RXD - Renault Truck RLD-3 - Volvo VDS 3/4</p> <p>ACEA E9-12 - API CJ-4/SN - CAT ECF 3 - Cummins CES 20081 - Deutz DQC III-10 LA - JASO DH-2 - Mack EO-0 Premium Plus - MAN 3575 - MB 228.31 - MTU Type 2.1 - Renault Truck RLD-3 - Volvo VDS 4</p> <p>ACEA E9-08 issue 2 - API CJ-4/SN - CAT ECF 1a/2/3 - CUMMINS CES 20078/20081 - Deutz DQC III-10 LA - Mack EO-0 Premium Plus - MAN 3575 - MB-Approval 228.31 - MTU Type 2.1 - RVI RXD - Renault Truck RLD-3 - SCANIA Low Ash - Volvo VDS 3/4</p> <p>ACEA E7-04-Issue-2-(2007) - ACEA E9-08 issue 2 - API CJ-4/SN - CAT ECF 1a/2/3 - Cummins CES 20081 - Detroit Diesel DDC 93K218 - Deutz DQC III-05 - Mack EO-0 Premium Plus - MAN 3575 - MB 228.31 - MTU Type 2.1 - RVI RXD - Renault Truck RLD-3 - Volvo VDS 3/4</p>	<p>5W30</p> <p>10W30</p> <p>10W40</p> <p>15W40</p>

Product and description	Standards	Viscosities
<p><b>Pallas 900</b>  PALLAS 900 is a UHPD (Ultra High Performance Diesel) synthetic based engine oil, with natural multi-grade properties. This oil resists exceptionally high temperatures, is non-shearable and, thanks to the SAE degree, it can be used all year round.</p>	<p>ACEA E4-99 issue 3 - ACEA E6-08/E7-08 - ACEA E9-08 issue 2 - API CF4/CJ-4 - DAF HP-2 - DEUTZ DQC IV-10 LA - Mack EO-N - MAN 3271.1/3277/3477 - MTU TYPE 3.1 - MB 228.5/228.51 - RGD - RVI RLD-2/RXD - Volvo VDS 3 - SCANIA Low Ash</p>	<p>5W30</p>
<p>PALLAS 900 is particularly recommended for the most demanding applications, both in the transport and public works sectors. This engine oil is very suitable for low emission 4-stroke diesel engines, including those equipped with a particulate filter DPF (Diesel Particle Filter) and engines using SCR technology (with AdBlue). Suitable for use in EURO 3 to EURO 6 diesel engines.</p>	<p>ACEA E4-99 issue 3 - ACEA E6 - 12 - ACEA E7 - 12 - ACEA E9-08 issue 2 - API CF4/CI-4 - DAF HP-2 - JASO DH-2 - Mack EO-N - MAN 3271.1/3277/3477 - MTU TYPE 3.1 - MB 228.51 - RGD - RVI RLD-2/RXD - Volvo VDS 3 - SCANIA Low Ash</p>	<p>10W30</p> <p>10W40</p>
	<p>ACEA E6-12/E7-12/E9-12 - API CI-4 - CAT ECF 1-a - CUMMINS CES 20076/20077 - DAF HP-2 - DEUTZ DQC IV-10 LA - JASO DH-2 - Mack EO-N - MAN 3271.1/3477 - MTU TYPE 3.1 - MB 228.51 - RGD - RVI RLD-2/RXD - Volvo VDS 3 - SCANIA Low Ash</p>	

Product and description	Standards	Viscosities
<p><b>Pallas 2000</b>  PALLAS 2000 5W30 is a synthetic UHPD (Ultra High Performance Diesel) and was specially developed to meet the most stringent requirements of the latest 4-stroke (heavy-duty) diesel engines, particularly in terms of emissions, fuel economy and extra long refreshment intervals.</p> <p>PALLAS 2000 allows refreshment intervals of up to 150,000 km (depending on the manufacturer's requirements) under conditions of intensive use and regular oil analysis. This oil is very suitable for engines with DPF (particulate filter) for which a top-5W30 engine oil is recommended for low emission engines that meet Euro V and Euro VI standards.</p> <p>PALLAS 2000 5W30 provides significant fuel savings (approximately 1 litre per 100 km) compared to an SAE 15W40 oil.</p>	Mack EO-OPP - MAN M 3677 / 3477 - MB Approval 228.51 - RENAULT RLD-3 - VOLVO VDS-4 - PERFORMANCE LEVELS - ACEA E6/E7/E9-08 Issue 2 - API CJ4 - CUMMINS CES 20081 - DEUTZ - DQC IV-10LA - JASO DH-2 - MB 228.31 - MB 235.28 - MTU Type 3.1 - SCANIA LOW ASH - Voith retarder Oil Class B	5W30
<p><b>Medos 700</b>  Medos 700 15W40 is an SHPD (Super High Performance Diesel) oil composed of high quality base oils and synthetic components. Medos 700 complies with the ACEA E7 standard and is the perfect engine oil for the lubrication of old engines up to EURO 4 engines with EGR system (without Diesel Particulate Filter). The multi-purpose character of Medos 700, ranging from trucks for motorway transport to heavy-duty diesels for off-road applications (public works, agriculture and forestry, etc.) and its engine protection properties have made it a recognised, multi-manufacturer-approved product.</p>	ACEA E7-12/E3/E5 - ACEA A3/B3 -12 - API CI4/ SL - BAUDOIN ENGINES - CAT ECF 1a - CAT ECF-2 - CUMMINS CES 20076/20077 - Deutz DQC III-10 - GLOBAL DHD-1 - IVECO - JASO DH-1 - KOMATSU - KES07851.1 - Mack EO-M+/EO-N - MAN 3275-1 - MB 228.3/229.1 - MTU-category 2 - RVI RLD-2 - Volvo VDS 3 - ZF-TE-ML 07C	15W40



## HYDRAULICS

Product and description	Standards	Viscosities
<p><b>Hydro HVI</b> The HVI series are hydraulic oils based on stabilised zinc with a high viscosity index. They are recommended for all high-pressure (&gt;350 bar) hydraulic systems requiring an ISO HV class.</p> <p>HVI is particularly suitable for industrial applications, but can also be used for mobile equipment (e.g. public works) that is subject to large temperature fluctuations.</p>	<p>ISO 6743 HV - DIN 51524 Teil 3 HVLP - DENISON HF2 - VICKERS M2950S - VICKERS I 286S - CINCINNATI P69(ISO68)/P70(ISO46) - US STEEL 127/136 - NFE 48603 HV</p>	<p>ISO VG 15 - 22 - 32 - 46 - 68</p>
<p><b>Hydralux HV</b> HYDRALUX HV can be used in all systems for which an ISO HM or HV oil class are prescribed. Due to its detergent properties (standard DIN 51524 part 3 HLP-D), it is particularly recommended for materials that are sensitive to contamination by water, even if important temperature fluctuations may occur.</p>	<p>DIN 51524 Teil 3 HLP-D - ISO 6743 HV - MAN N698 - NFE 48603 HV - NFE 60200 HV - VICKERS I 286S - VICKERS M2950S</p>	<p>ISO VG 22 - 32 - 46 - 68</p>
<p><b>Fluid BIO S</b> FLUID BIO S is a fluid adapted to hydraulic systems operating under severe conditions that require an oil with high anti-wear properties and a highly stable viscosity index.</p> <p>FLUID BIO S is recommended wherever the environment may be threatened by leaks or oil spills.</p> <p>FLUID BIO S does not require any special counter-indications and can be used wherever a conventional mineral hydraulic oil is prescribed. The high and natural viscosity index makes it possible to bridge different viscosity classes. WARNING: mixing with mineral and vegetable oils should possibly be avoided.</p>	<p>ISO 6743 HV - DIN 51524 Teil 3 HVLP</p>	<p>ISO VG 22 - 46</p>



## STOU (SUPER TRACTOR OIL UNIVERSAL)

Product and description	Standards	Viscosities
<p><b>Xanthos</b></p> <p>Xanthos 10W40 is a multi-purpose lubricant for engines and machines in public works and agriculture. It is a STOU (Super Tractor Oil Universal) and is recommended for the lubrication of engines, gearboxes, hydrostatic transmissions, hydraulic systems, wet brake systems and compressors.</p> <p>Its high-quality base oil and specific additives ensure good corrosion resistance, good anti-foaming properties and good shear resistance. Thanks to its wide range of applications, Xanthos is an ideal partner for the rationalisation of your oil stock. In this way, no wrong oils can be used and no large quantity of different oils need be kept in stock.</p>	<p>AACEA E2-16/E4-08/E7-08 - ALLISON C4 - API CE/CF-4/CG-4/CI-4/GL4/SF - API GL5 (low speed, high torque) - CAT T02 - Ford M2C 159B - ISO 6743 HV - JD J20A/J20C/J20D/J27 - MAN 271 - MB 227.1/228.1/228.3 - MIL-L-2104D - MIL-L-46152 B - MF 1135/M1139/M1144/M1145 - VICKERS M2950S - ZF-TE-ML 06B/07B</p>	<p>10W40</p>
<p><b>Agrialle</b></p> <p>Agrialle, an STOU lubricant (Super Tractor Oil Universal), lubricates all parts (engines, hydraulic systems, mechanical transmissions, immersed brakes) in agricultural vehicles: tractors, combines, chaff cutters, etc. The high quality mineral base oil and specific additives guarantee good and reliable protection of the lubricated parts in the short and long term.</p>	<p>ACEA E4-08/E7-08 - ALLISON C4 - API CE/CF-4/CG-4/CI-4/GL4 - CAT T02 - Ford M2C 159B - JD J20A/J20C/J27A - MF M1139/M1141/M1144/M1145 - New Holland 82009202 - NH 410B - ZF-TE-ML 06B/06C/07B</p>	<p>10W30 - 15W30</p>
	<p>ACEA E4-08/E7-08 - ALLISON C4 - API CI-4/GL4 - CAT T02 - Ford M2C 159B - JD J20A/J20C/J27A - MF M1139/M1141/M1144/M1145 - New Holland 82009202 - NH 410B</p>	<p>15W40</p>



## UTTO (UNIVERSAL TRANSMISSION TRACTOR OIL)

Product and description	Standards	Viscosities
<p><b>Fluid HIS</b></p> <p>Fluid HIS, a UTTO lubricant (Universal Transmission Tractor Oil), greases all parts (with the exception of the engine) of agricultural vehicles. FLUID HIS may be used whenever a fluid is prescribed that meets the following specifications for mechanical transmissions (such as gearboxes, (torque) converters and distribution boxes), hydraulic transmissions and submerged brake systems.</p>	<p>AAGCO POWERFLUID 821XL - ALLISON            C4 - API CG-4/GL4 - CAT T02 - John Deere            J20B/J20C/J20D - Massey Ferguson CMS M            1135/1141/1143/1145 - Case New Holland CNH MAT            3505/3509/3525/3540 - CASE MS 1207/1210 -            FENDT VARIO - Ford ESN-M2C 86B/86C/134D            - FNHA-2-C-200.00 - FNHA-2-C-201.00 - Kubota            UDT Fluid - LANDINI - NH 410B - RENAULT/            CLAAS - VCE WB 101 - VOLVO WB 101 - ZF-TE-ML            05F/03E/06K/17E/21F</p>	<p>10W30            ISO VG 68</p>
<p><b>Fluid VO</b></p> <p>Fluid VO is a multi-purpose mineral-based oil, type UTTO (Universal Transmission Tractor Oil). FLUID VO has been adapted for the lubrication of various components requiring this type of oil, namely mechanical transmissions, hydraulic systems and submerged brakes. This oil can be used for both public works machinery and agricultural vehicles (in particular VOLVO machines with the prescribed oil type WB 101).</p>	<p>API GL4 - ALLISON C4 - CAT T02 - DENISON HF0 -            Ford M2C 134D - Case New Holland CNH MAT            3505/3509/3525 - CASE MS 1210/1207 - FNHA-            2-C-200.00 - FNHA-2-C-201.00 - Ford ESN-M2C            134D/86B/86C - ISO 6743 HV - JD J20C/J20D            - Kubota UDT Fluid - Massey Ferguson CMS M            1135/1141/1143/1145 - NH 410B - VCE WB 101 -            ZF-TE-ML 03E/05F/17E/21F</p>	<p>SAE 30            ISO VG 68</p>
<p><b>Fluid SVO</b></p> <p>FLUID SVO is a fully synthetic UTTO oil specially developed for transmissions, hydraulic clutches and submerged brake systems. The product satisfies the Volvo WW 102 requirements for wet brakes. FLUID SVO has a low congealing point, excellent anti-friction properties (anti-stick slip). The anti-wear and ultimate pressure capabilities ensure the flawless lubrication of gears, pumps, bearings and hydraulic system.</p>	<p>API GL4 - ALLISON C4 - CASE MS 1207/1209/1210 -            CAT T02 - Ford M2C 41B/48C/86C/134D - ISO            6743 HV - JD J20D - KOMATSU AXO 80 - Kubo-            ta UDT Fluid - Massey Ferguson CMS M            1135/1141/1143/1145 - NH 410B - VOLVO WB 101 -            VOLVO WB 102 (97304) - ZF-TE-ML 03E/05F/06K</p>	<p>ISO VG 32 - 46</p>

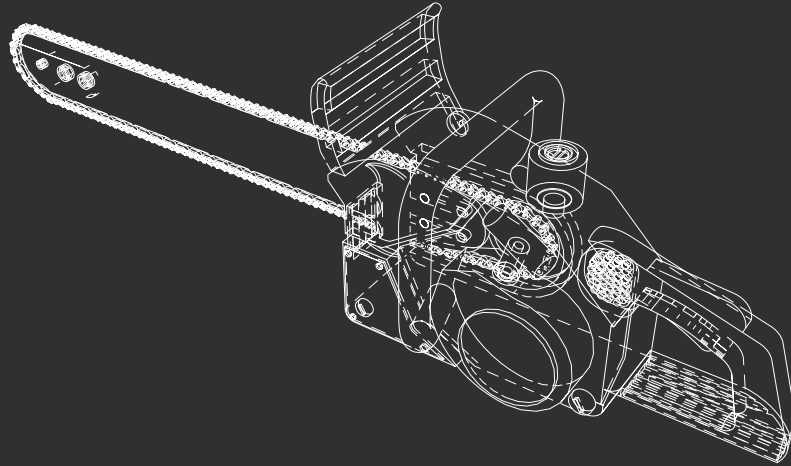
## FOR DRIVE AXLES AND DIFFERENTIALS

Product and description	Standards	Viscosities
<p><b>Gear ZF</b></p> <p>Gear ZF is an oil that is extremely suitable for gearboxes (rear axles and differentials) in passenger cars and trucks, but can also be used for industrial gearboxes. The high quality mineral base oils and specific additives provide excellent anti-wear and ultimate pressure properties, thermal stability and good oxidation and shear resistance. Good fluidity at low temperatures ensures optimum initial lubrication without foaming.</p> <p>Three viscosities are available within the Gear ZF family: 80W90, 85W90, 85W140. PLEASE NOTE: With its extreme pressure (EP) nature Gear ZF is unsuitable for contact with yellow metals (copper, bronze, etc.).</p>	<p>API GL5 - MB 235.0 - DAF - FORD SR-M2C9102-A -            KOMATSU KES07861 - MAN 342 M-1 - MIL-L-2105C            - MIL-L-2105D - RENAULT - VOITH 3.325-339 -            VOLVO 97310/97316 - ZF-TE-ML 01/05A/07A/16B/1            6C/16D/17B/19B/21A</p>	<p>80W90 - 85W90            - 85W140</p>
<p><b>Universal Gear</b></p> <p>UNIVERSAL GEAR 80W90 is designed to lubricate all mechanical gearboxes and differentials that require an ultra-pressure performance level API GL4 or GL5 SAE 80W90.</p>	<p>API GL4/GL5 - DAF - MAN 342 M-1 - MB 235.0            - MIL-L-2105D - RENAULT - VOITH 3.325-339 -            VOLVO 97310/97316 - ZF-TE-ML 05A/07A - ZF-TE            ML 16B - ZF-TE-ML 16C/16D/17B/19B/21A</p>	<p>80W90</p>

## GREASES

Product and description	Viscosities
<p><b>Supergrease 200</b></p> <p>SUPERGREASE 200 is a highly adhesive multi-purpose lithium/calcium grease, specially adapted to function under extreme temperatures and load conditions. This grease is therefore recommended for the lubrication of equipment in public works. SUPERGREASE 200 is suitable for the lubrication of bearings, whether or not operating in the presence of water, shafts and joints and wheel and hub bearings.</p>	NLGI 2
<p><b>Caliopal</b></p> <p>Caliopal is a strong adhesive high quality lubricating grease that was specially developed with a high viscosity base oil. This means that this product can withstand heavy loads and is highly water-resistant. This grease offers excellent resistance to extreme pressure conditions, even without the use of sulphur-containing EP additives. Caliopal is recommended for applications that are subject to a combination of high loads, low speeds and possible washing out. The product is also suitable for the lubrication of open gears, heavy chains and tractor saddles.</p>	NLGI 0 NLGI 2
<p><b>Thermoplex</b></p> <p>Thermoplex is an EP grease (Extreme Pressure), developed on the basis of a lithium complex soap. This grease is a universal "long life" grease and is particularly suitable for long-term use in a wide range of temperatures, from - 30°C to 150°C, with peaks of up to 220°C.</p> <p>Thermoplex can withstand high speeds and heavy loads and shocks, and is therefore suitable for lubrication of truck axles, lubrication of all ball, roller or needle bearings and for bearings that are subject to heavy pressure and high temperature, even in the presence of water.</p> <p>THERMOPLEX is classified as KP2N-25 in accordance with DIN 51502 and ISO-L-XCDIB2 accordance with ISO 6743.</p>	NLGI 2

## LUBRICANTS FOR HORTICULTURE



### **Unil Lubricants horticultural lubricants**

Unil Lubricants lubricants and oils help reduce the maintenance costs of horticultural machinery. The high performance of the oils offers all your machines perfect protection.

The oils of Unil Lubricants are designed for both older and newer equipment. They all guarantee perfect protection against wear, corrosion, mud and soot.

Due to the wide temperature range of Unil Lubricants oils, engines are always kept cool. This prevents overheating of the parts. Even at low temperatures, all elements of the engine remain well protected.

Unil Lubricants offers a wide variety of professional products for both diesel and gasoline engines, chainsaws, lubricants and other specialised products for each type of horticultural machine.







## CHAINSAW OIL

Product and description	Standards	Viscosities
<p><b>Contact M/H/E</b> Mineral chainsaw lubricating oil reinforced with polymers to obtain an adhesive oil film. This type of oil is also prescribed for vibrators and transmission chains with reduced lubrication.</p> <p>The CONTACT M(edium) and CONTACT H(eavy) grades are intended for the chains of saws with a combustion engine. CONTACT E was specially developed for the chain lubrication of electric chainsaws.</p>	/	<p><b>Contact M:</b> - SAE 30 - ISO VG 100</p> <p><b>Contact H:</b> - SAE 40 - ISO VG 150</p> <p><b>Contact E:</b> - SAE 20 - ISO VG 46</p>
<p><b>Chain BIO</b> Chain BIO is an adhesive biodegradable oil for the lubrication of chain-saw chains. CHAIN BIO is indispensable for forestry companies that care about the environment.</p>	ACEC-L-33 A-93 (> 90%)	<p>Chain Bio: - SAE 30 - ISO VG 100</p>
<p><b>Opaljet 16 S</b> Opaljet 16S is a multi-grade engine oil that offers an extremely high level of performance.</p> <p>This lubricant is a product that will meet all expectations of the most powerful engines such as petrol, diesel, turbo diesel or engines with multi-valve systems!</p>	ACEA A3/B3 -12 - API CF/SM - MB 229.1 - RN 0700 - VW 501.01/505.00	SAE 10W40



## MOTORIZED GARDEN TOOLS

Product and description	Standards	Viscosities
<p><b>2T Special</b>            2T SPECIAL is particularly recommended for all air-cooled 2-stroke engines that operate at very high temperatures. This oil is adapted to all types of gasoline.</p>	API TC - JASO FC	10W30 ISO VG 68
<p><b>Merion 4T</b>            Merion 4T is especially suitable for the lubrication of small petrol engines in horticulture. With features such as excellent corrosion protection and resistance to high temperatures, it is the perfect oil for your garden tools.</p>	API CF / SF	SAE 30
<p><b>Opaljet 12 S</b>            Opaljet 12S is recommended for the lubrication of gasoline and diesel engines with or without turbo. Thanks to the many standards and specifications, this motor oil can be used for a wide range of applications. Although this oil was created to lubricate an extensive fleet of vehicles, it is extremely suitable for engines in various horticultural machines. Due to the high quality of additives, the engine is protected for longer and operates significantly quieter</p>	ACEA E2-96 Issue 5 (2007) - ACEA A2-96 Issue 3 (2002) - ACEA A3 - ACEA B3-98 Issue 2 (2004) - API CF/SJ - MAN 271 - MB 229.1 - PSA B 71 2295 - VW 501.01/505.00 - Volvo VDS	SAE 15W30
<p><b>Opaljet 16 S</b>            Opaljet 16S is a multi-grade engine oil that offers an extremely high level of performance. This lubricant will meet all expectations of the most powerful engines (such as petrol, diesel, turbo diesel or engines with multi-valve systems)!</p>	ACEA A3/B3 -12 - API CF/SM - MB 229.1 - RN 0700 - VW 501.01/505.00	SAE 10W40



Product and description	Standards	Viscosities
<p><b>Garden 10W30</b>            GARDEN 10W30 was specially developed to lubricate motorised 4-stroke machines within the horticultural sector (lawnmowers, mowers and saws, light diesel tractors etc.).</p> <p>This oil is equipped with a special additive so that the oil film perfectly protects the engine parts against degradation caused by humidity.</p> <p>GARDEN 10W30 is ideal for use on machines for which an SAE 30 or 10W30 oil is prescribed.</p>	API CF/SL - ACEA A3/B3-08 - MB 229.1	SAE 10W30

## SPRAY

Product and description	Standards	Viscosities
<p><b>Chain S</b>            Polyvalent 100% synthetic oil for lubricating and protecting chains, hinges, bolts, springs, locks, fine mechanisms, battery connections, etc.</p>	/	/

### **3 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 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 amount 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 carrying out 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 | www.unil.com | @UnilLubricants

