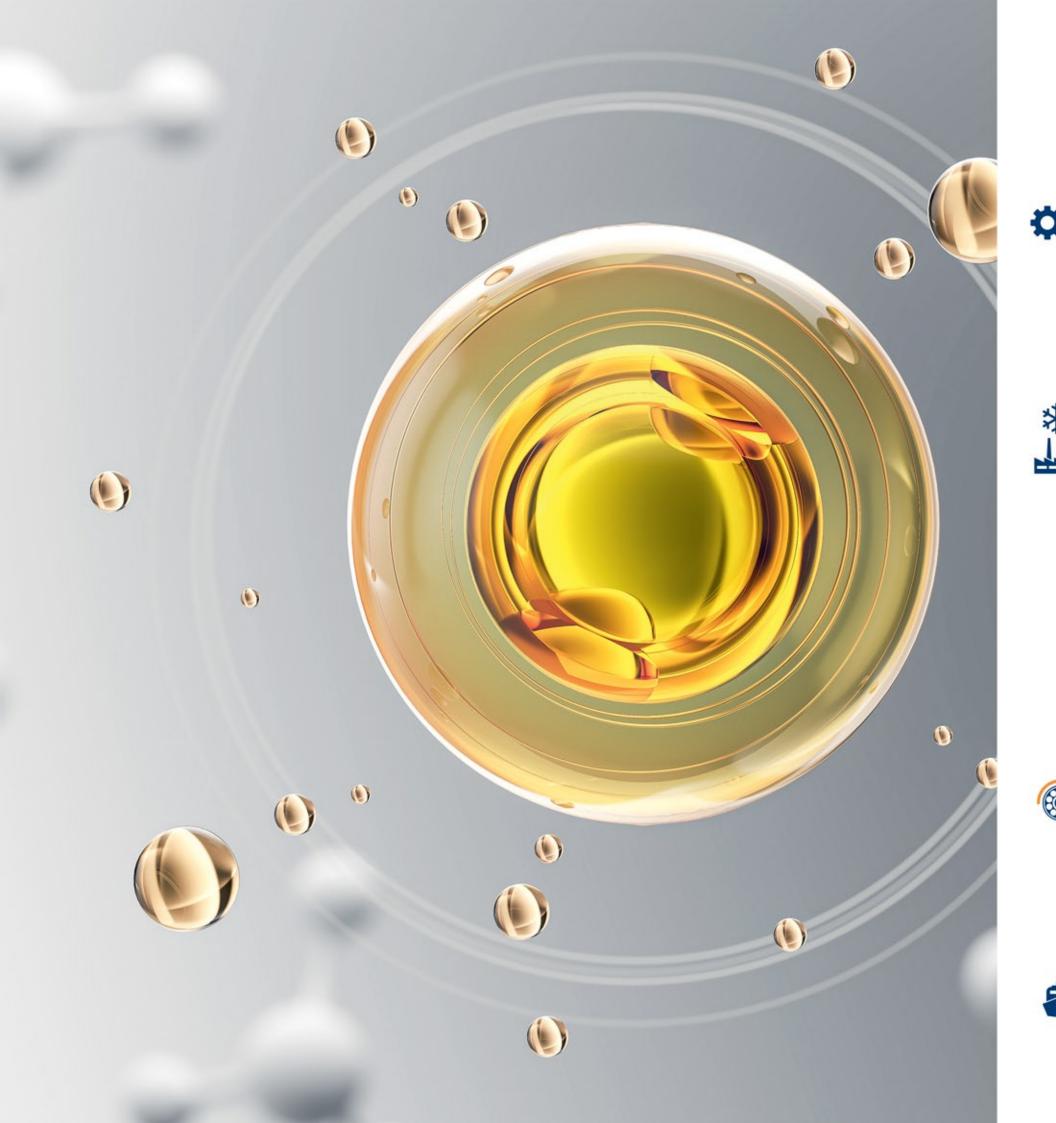


2023
product
catalogue





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SLIDER Sustainable Management

- · Steady economic growth over the past 20 years
- · Continuous growth of export sales
- Sound environmental management practices
- Investing in our people and our local community
- Management system according to ISO9001, ISO14001 and ISO45001 standards.

SLIDER Production Capability

- 2,000 MT base oils bulk storage facility to ensure availability, steady supply and avoid pricing fluctuations
- · In-house R&D and QC facilities
- Use of verified additives by major European producers
- 5 fully automated blenders, with minimum blending capacity of 16000 MT /year/shift
- Fully equipped grease production unit with a capacity of 4000 MT/year
- . Bottling and labeling lines with average output of 3000 bottles per hour
- · Bulk storage capacity of 500 MT of finished lubricants.

Established in 1963, Slider SA is operating with consistency, innovative research, and superior quality products, covering every aspect and need for lubrication across all fields of economic activity.

Having covered significant milestones over the last years, we have significantly boosted our international presence, by exporting our products across 4 continents and more than 20 countries.

The solid trust of our customers is a result of the never-ending efforts and attention to detail by our modern Quality Control and R&D department, which holds all authority over the approval of any incoming raw material and any product, thus ensuring the high-quality standard that is characteristic of our corporate profile.

The determination of our company in implementing a unified quality-environment-safety management system is certified with accreditation under the international standards ISO 9001, ISO 14001, and ISO 45001, by BVC.





THE HISTORY OF THE COMPANY





♥ VOTANIKOS **ATHENS**



1968

1994

♥ PIRAEUS START OF OIL & GREASE PRODUCTION



1984

◆ THESSALONIKI SECOND PLANT

1987

NEW BRAND NAME SLIDER



2002

RECONSTRUCTION AND EXPANSION OF FACILITIES CERTIFICATION UNDER **ISO 9001 / 2000**



1993

START OF PRIVATE LABEL PRODUCTION



2004

CERTIFICATION UNDER ISO 14001



CERTIFICATION BY

EN ISO 9000: 1994

BVQI ISO 9002 /

2011

• RITSONA, EVIA **NEW PLANT RELOCATION OF FACILITIES**



2016

RITSONA PLANT EXPANSION AND INSTALLATION OF NEW MACHINERY



2012

EXPORT DEVELOPMENT BY CONTINUED PARTICIPATION IN INTERNATIONAL **EXHIBITIONS**



2017

CERTIFICATION ISO 45001



2018

500.000 Lt **Bulk Storage**



2022

1.500.000 Lt **Bulk Storage**

















GENESIS GF 5W-20

Ultra fuel economy synthetic engine oil for passenger cars with extended drain intervals. Specially developed for the Ford EcoBoost and Jaguar-Land Rover engines. Ultimate cold starting performance. Low oil consumption. Minimum exhaust emissions and maximum engine protection.

API SN/CF, ILSAC GF-5, ACEA C5, Ford WSS-M2C948A/B, ST JLR.03.5004











SAE 5W-20

081441

081221

081801 081911

081161

GENESIS C5 0W-20

Top tier, premium synthetic engine oil for modern passenger cars with extended drain intervals. Ultimate cold starting performance. Low oil consumption. Minimum exhaust emissions and maximum engine protection. Outstanding fuel economy performance due to revolutionary molybdenum and organic friction modifier chemistry.

SPECIFICATIONS:

API SN, ACEA C5, MB 229.71, STJLR.51.5122











SAE 0W-20

156161

156441

156221

156801

156911



GENESIS FE 0W-20

Ultra fuel economy synthetic engine oil for passenger cars. Specially developed for energy conserving gasoline engines. Ultimate cold starting performance. Fuel economy. Minimum exhaust emissions and maximum engine protection.

SPECIFICATIONS:

API SN-RC, ILSAC GF-5, GM Dexos 1











SAE 0W-20 082161 082441

082221

082801

082911



GENESIS FE 5W-30

Superior quality, fuel economy synthetic engine oil for passenger cars. Specially developed for energy conserving gasoline engines. Ultimate cold starting performance. Fuel economy. Minimum exhaust emissions and maximum engine protection.

SPECIFICATIONS:

API SN-RC, ILSAC GF-5, GM Dexos 1









099221

099801

099911



Premium quality, synthetic engine oil for passenger cars with extended drain intervals. Specially developed for engines equipped with exhaust after treatment systems, including particulate filters. Optimum cold starting. Low oil consumption. Minimum exaust emissions.

SPECIFICATIONS:

API SN/CF, ACEA C3, MB 229.31, MB 229.51, MB 229.52, Renault RN 0700/710











SAE 0W-30

157161

157441

157221

157801

157911

GENESIS RN 5W-30



Top tier, versatile, synthetic passenger car engine oil, designed to prevent LSPI and intended for use as catalyst compatible oil at extended drain intervals in gasoline and diesel modern vehicles equipped with aftertreatment systems. Ultimate cold starting performance. Fuel economy. Minimum exhaust emissions and maximum engine protection.

SPECIFICATIONS:

API SP, ACEA C2/C3, Renault RN 17, RN 0700/710, Daimler MB 229.31, MB 229.51/52, PSA B71 2290











159161 159441 159221 159801

SAE 5W-30 159911











GENESIS VW 5W-30

Synthetic engine oil for passenger cars with extended drain intervals. Specially developed for engines equipped with exhaust after treatment systems, including particulate filters. Suitable for the VW group engines requiring a VW 504.00/507.00 quality level oil.

SPECIFICATIONS:

API SN, ACEA C3, MB 229.51, BMW LL04, VW504.00/507.00, Porsche C30, VW TL 52195











SAE 5W-30

155161

155441

155221

155801 155911





GENESIS C2 5W-30

Fuel economy synthetic engine oil for passenger cars with extended drain intervals. Specially developed for engines equipped with exhaust after treatment systems, including particulate filters. Optimum cold starting. Low oil consumption. Minimum exhaust emissions.

SPECIFICATIONS:

API SN/CF, ACEA C2, Renault RN 0700, PSA B71 2290











SAE 5W-30 150161

150441

150221

150801 150911



GENESIS C3 5W-30

Synthetic engine oil for passenger cars with extended drain intervals. Specially developed for engines equipped with exhaust after treatment systems, including particulate filters. Optimum cold starting. Low oil consumption. Minimum exaust emissions. Superior engine protection.

API SN/CF, ACEA C3, MB 229.51, approval 229.52, 229.31, 226.5, BMW Longlife 04, Renault RN 0700/710 , GM DEXOS 2













SAE 5W-30

100161

100441

100221

100801 100911



GENESIS C3 5W-40

Synthetic engine oil for passenger cars with extended drain intervals. Specially developed for engines equipped with exhaust after treatment systems, including particulate filters. Optimum cold starting. Low oil consumption. Minimum exaust emissions. Superior engine protection.

SPECIFICATIONS:

API SN/CF, ACEA C3, MB 229.51, 229.31, 226.5, BMW Longlife 04, VW 502.00/505.00/505.01, Renault RN 0700/710 , GM DEXOS 2, Porsche A40











SAE 5W-40

152161

152441

152221 152801

152911



GENESIS C4 5W-30

Premium quality synthetic engine oil, designed for engines equipped with exhaust after treatment systems. Formulated with the Low Saps additive technology to meet the Renault Group RN 0720 specification. Recommended for the Renault, Mercedes and Nissan models equipped with Renault DPF diesel engines.

SPECIFICATIONS:

API SN, ACEA C4, MB 226.51, Renault RN0720



154161



154441



154221





154801 154911



GENESIS FS 5W-30

SAE 5W-30

High performance synthetic engine oil for passenger cars. It offers optimum anti wear protection and engine cleansing for extended oil drain intervals.

SPECIFICATIONS:

API SL/CF, ACEA A3/B4, MB 229.3, VW 501.01/502.00/505,00, BMW LL-01, OPEL GM-LL-B-025













SAE 5W-30 101161

101911

101441 101801 101221









GENESIS FS 5W-40

High performance synthetic engine oil for passenger cars. It offers optimum anti wear protection and engine cleansing for extended oil drain intervals.

SPECIFICATIONS:

API SN/CF, ACEA A3/B4, MB 229.3, VW 501.01/502.00/505,00, BMW LL-01, OPEL GM-LL-B-025, RENAULT RN 0700/0710











SAE 5W-40

102161

102441

102221 102801

102911

GENESIS RS 10W-60

Superior quality synthetic engine oil for high performance engines. Suitable for racing cars where the manufacturer suggests a SAE 10W-60 viscosity grade oil. It offers optimum anti wear protection and engine cleansing.

SPECIFICATIONS:

ACEA A3/B4







SAE 10W-60 109221 109801 109911



GENESIS XR 10W-40

High performance semi-synthetic engine oil for passenger cars and light commercial vehicles. It offers optimum anti wear protection and engine cleansing for long drain intervals.

SPECIFICATIONS:

API SN/CF, ACEA A3/B4, MB 229.3, VW 501.01/505,00, BMW LL-01 PSA B71 2300, RENAULT RN 0700/0710











SAE 10W-40 103161

103441

103221

103801

103911











GENESIS AR 10W-40

Multi-grade engine oil for passenger cars and light commercial vehicles. It offers anti wear protection, engine cleansing for long periods. A reliable solution for low service cost.

SPECIFICATIONS:

API SL/CF, ACEA A3/B4, MB 229.1, VW 501.01/505.00











SAE 10W-40 105161

105441

105221

105801

105911



GENESIS AR 15W-40

Multi-grade engine oil for passenger cars and light commercial vehicles. It offers anti wear protection, engine cleansing for long periods. A reliable solution for low service cost.

SPECIFICATIONS:

API SL/CF, ACEA A3/B4, MB 229.1, VW 501.01/505.00











SAE 15W-40 106161

106441

106221

106801

106911

GENESIS ML 20W-50

Multi grade engine oil for passenger cars and light commercial vehicles. It offers anti wear protection, engine cleansing and low service cost.

SPECIFICATIONS:

API SJ/CF











SAE 20W-50 111161

111441

111221

111801

111911









16x1Lt PACKAGING PACKAGING PACKAGING PACKAGING PACKAGING







TAURUS LX 5W-30

Global top tier synthetic HDD engine lubricant based on the lower SAPS additive technology. It covers most OEM requirements for engines meeting the latest EURO IV, V and VI exhaust emissions requirements. Designed for ultimate engine protection and cleanliness for extended oil drain intervals.

SPECIFICATIONS:

API CK-4, ACEA E4/E6/E7/E9, Volvo VDS-4.5/ Renault RLD-4/ Mack E0-S-4.5. MB 228.51/228.52/ 228.31, JASO DH-2/DH-1/DH-0, MAN M 3677/M 3777/ M3477/ M3775/ M3271-1, MTU Cat.3.1, MTU Cat.3.1, Cat2.1, Cummins CES 20086, CES20081, Deutz DQC IV-18 LA, Detroit DFS 93K22, 93K218, Caterpillar ECF-3, Scania LDF-4, DAF Extended Drain,









SAE 5W-30

204221 204801 204911

TAURUS LX 10W-40

Ultra high performance, lower SAPS synthetic HDD engine lubricant. It covers European and other OEM requirements for EURO IV, V and VI exhaust emissions requirements. Designed for engines with DPF, offering ultimate protection and cleanliness for extended oil drain intervals.

SPECIFICATIONS:

API CI-4, ACEA E6/E7/E9, MB 228.51 (approval), MAN M 3477/ 3271-1, VOLVO VDS-3, Renault Trucks RLD-2/RXD/RGD, Mack EO-N, MTU Type 3.1, Deutz DQC IV-18 LA, DQC TTCD, DAF Meet Requirements,, Cummins CES 20076, JASO DH-2, Caterpillar ECF-1a







SAE 10W-40 206221

206801

206911

TAURUS FE 15W-40

Global top tier synthetic HDD engine lubricant based on the lower SAPS additive technology. It covers most OEM requirements for engines meeting the latest global exhaust emissions requirements. Designed for ultimate engine protection, oxidation resistance and cleanliness for extended oil drain intervals.

SPECIFICATIONS:

API CK-4/SN, ACEA E9/E7, Volvo VDS-4.5/ Renault RLD-4/ Mack EOS 4.5, MB 228.31, MAN M3575, MTU Cat.2.1, Cummins CES 20086, Deutz DQC III-10 LA. Detroit Diesel DFS 93K222, Caterpillar ECF-3, Ford WSS-M2C171-F1,







SAE 15W-40 199221

199801

199911



TAURUS FE 10W-30

Global top tier synthetic HDD engine lubricant based on the lower SAPS additive technology. It covers most OEM requirements for engines meeting the latest global exhaust emissions requirements. Designed for ultimate engine protection, oxidation resistance and cleanliness for extended oil drain intervals.

SPECIFICATIONS:

API CK-4/SN, ACEA E9/E7, Volvo VDS-4.5/ Renault RLD-4/ Mack EOS 4.5, MB 228.31, MAN M3575, MTU Cat.2.1, Cummins CES 20086, Deutz DQC III-10 LA, Detroit Diesel DFS 93K222, Caterpillar ECF-3, Ford WSS-M2C171-F1,







SAE 10W-30 200221

200801 200911

TAURUS FE 10W-40

Global top tier synthetic HDD engine lubricant based on the lower SAPS additive technology. It covers most OEM requirements for engines meeting the latest global exhaust emissions requirements. Designed for ultimate engine protection, oxidation resistance and cleanliness for extended oil drain intervals.

SPECIFICATIONS:

API CK-4/SN, ACEA E9/E7, Volvo VDS-4.5/ Renault RLD-4/ Mack EOS 4.5, MB 228.31, MAN M3575, MTU Cat.2.1, Cummins CES 20086, Deutz DQC III-10 LA, Detroit Diesel DFS 93K222, Caterpillar ECF-3, Ford WSS-M2C171-F1







SAE 10W-40 198221

198801 198911

TAURUS FX 10W-40

Ultra high performance, full SAPS synthetic HDD engine lubricant. Designed for engines with EGR and SCR exhaust aftertreatment systems, offering ultimate wear protection and cleanliness for extended oil drain intervals. Suitable for Euro III,IV and specific Euro V engines.

SPECIFICATIONS:

API CI-4, ACEA E4/E7, MB 228.5 MAN M3277, MTU TYPE III, VOLVO VDS 3, CUMMINS 20076/77/78. RENAULT RLD-2, MACK EON, DQC III-10, GLOBAL DHD-1, JASO DH-1, DDC 93K215, Allison C4,







SAE 10W-40 205221

205801

205911

















TAURUS V4 10W-40

Top tier mid SAPS, HDD engine oil, designed to meet the VOLVO VDS-4 and other modern low emission diesel engines equipped with DPF systems. It offers excellent soot handling, oxidation and anti-wear protection for extended oil drain intervals.

SPECIFICATIONS:

API CJ-4/SN, ACEA E7/E9, VOLVO VDS 4, CAT ECF-3, MACK E0-0 Premium Plus. CUMMINS CES20081, MB 228.31, MAN M 3575, MTU Cat. 2.1, RENAULT RLD-3. Detroit Diesel DFS 93K218, Deutz DQC III-10 LA.







SAE 10W-40 209221

209801

209911



TAURUS V4 15W-40

Top tier mid SAPS, HDD engine oil, designed to meet the VOLVO VDS-4 and other modern low emission diesel engines equipped with DPF systems. It offers excellent soot handling, oxidation and anti-wear protection for extended oil drain intervals.

SPECIFICATIONS:

API CJ-4/SN, ACEA E7/E9, VOLVO VDS 4 approval, MACK E0-0 Premium Plus approval, RENAULT RLD-3 approval, CUMMINS CES20081, MB 228.31, MAN M 3575, Detroit Diesel DFS 93K218, Deutz DQC III-10 LA, JASO DH-2, MTU Cat. 2.1, CAT ECF-3.







SAE 15W-40 207221

207801

207911

TAURUS SHC 10W-40

Super high performance, semi-synthetic HDD engine oil designed for heavy duty trucks and off road machinery. Suitable for Euro II, III engines and Euro IV & V without DPF. It offers maximum soot handling, oxidation and anti-wear protection under severe operating conditions.

SPECIFICATIONS:

API CI-4/SL, ACEA E7, ACEA A3/B4, MB 228.3, MB 229.1, RENAULT RLD-2 (approval). VOLVO VDS-3 (approval), MACK EO-N (approval), MAN M 3275-1, CUMMINS CES 20076/77, Caterpillar ECF-1a













TAURUS XD 15W-40

Super high performance, HDD engine oil designed for heavy duty trucks and off road machinery. Suitable for Euro II, III engines and Euro IV & V without DPF. It offers maximum soot handling, oxidation and anti-wear protection under severe operating conditions.

SPECIFICATIONS:

API CI-4/SL, ACEA E7, MB 228.3, MAN M 3275-1, CUMMINS CES 20076/77/78, RENAULT RLD-2 (approval), VOLVO VDS-3 (approval), MACK EO-N (approval), Caterpillar ECF-2/1A, MTU Category 2, JASO DH-1, Detroit DFS 93K215.











SAE 15W-40 202441

202221

202801

202911



TAURUS TD 15W-40

High performance multi-grade HDD engine lubricant, designed for use in a wide range of Euro I,II & III diesel engines, both normally aspirated and turbo charged. It offers anti wear protection, engine cleansing for long periods. A reliable solution for low service cost.

SPECIFICATIONS:

API CH-4/SJ, ACEA E5-02 (quality), ACEA A3/B3, MAN M 3275-1, MB 228.3, VOLVO VDS-2 (quality), MTU Cat.2.







SAE 15W-40 216221

216801

206911



TAURUS TD 20W-50

High performance multi-grade HDD engine lubricant, designed for use in a wide range of Euro I.II & III diesel engines, both normally aspirated and turbo charged. It offers anti wear protection, engine cleansing for long periods. A reliable solution for low service cost.

SPECIFICATIONS:

API CH-4/SJ, ACEA E5-02 (quality), ACEA A3/B3, MAN M 3275-1, MB 228.3, VOLVO VDS-2 (quality), MTU Cat.2.







SAE 20W-50 217221

217801

217911















TAURUS HD 15W-40 / 20W-50

High quality multi grade HDD engine oils designed to offer protection and engine cleanliness in older vehicles for normal drain intervals.

SPECIFICATIONS:

API CF-4/SJ, ACEA E2-96 quality, MB 228.1 MTU Cat.1, MAN 270/271 VOLVO VDS











SAE 15W-40 213161 SAE 20W-50 212161 213441 212441

213221 212221 213801 212801

213911 212911



TAURUS S-3 10W / 20W20 / 30 / 40 / 50

High quality mono-grade lubricants, suitable for diesel and gasoline engines, transmissions, final drives and hydraulic systems.

SPECIFICATIONS:

API CF-4/SJ, ACEA E2-96 quality, MB 228.0 MTU Cat.1, MAN 270, VOLVO VDS, CAT TO-2, Alisson C-4.







SAE 10W SAE 20W20	224221	224801 223801	224911 223911
SAE 30	221221	221801	221911
SAE 40 SAE 50	222221 225221	222801 225801	222911 225911

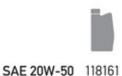


TAURUS BASIC 20W-50

Mineral multi-grade engine oil for older diesel and gasoline engines, operating under moderate conditions.

SPECIFICATIONS:

API SF/CD, MIL-L-2104 D/46152B.





118441



118221





118801 118911



TAURUS BASIC 10W / 30 / 40 / 50

Mono-grade lubricants, suitable for older diesel and gasoline engines operating under moderate conditions. Also suitable for transmissions, and hydraulic systems.

SPECIFICATIONS:

API SF/CD, MIL-L-2104 D/46152B, CAT TO-2, Allison C-4.





TAURUS GEO SAE 30

High performance, low ash, mono-grade engine lubricant, specially designed for spark-ignited natural gas engines. It provides excellent detergency and dispersancy, oxidation and rust inhibition.

SPECIFICATIONS:

API CC







SAE SAE 30 230161

230441 230911



TAURUS CF-2 SAE 40

Low sulphated ash engine oil specially designed for two-stroke diesel engines, naturally aspirated and turbo charged.

SPECIFICATIONS:

API CF-2/CF/SF, Detroit Diesel 7SE2709505







SAE SAE 40 244161

244441

204911

15 16



















TAURUS TO-4 10W / 30 / 50

Monograde lubricants specially designed for use in hydraulic systems. power shift transmissions, differentials, clutches and final drives of Caterpillar and Komatsu off-road machinery.

SPECIFICATIONS:

CAT TO-4 & TO-2, COMATSU, ALLISON C-4, API CF-2









SAE 10W	226221	226801	226911
SAE 30	227221	227801	227911
SAE 50	228221	228801	228911



ARGOS TUO 10W-30 /15W-40 / 20W-40

Multi-grade universal lubricants for agricultural tractors (STOU), specially designed for use in engine, gear box, differential, hydraulic system and wet brakes.

SPECIFICATIONS:

API CG-4/SF, API GL-4, ACEA E3-96 (quality), JOHN DEERE J 27, MASSEY FERGUSON CMS M 1144, 1145& 1139, NEW HOLLAND 82009201/2/3







SAE 10W-30	233221	233801	233911
SAE 15W-40	232221	232801	232911
SAE 20W-40	231221	231801	231911



ARGOS FLUID 10W-30 / 20W-30

High quality universal tractor transmission fluids (UTTO), designed for use in hydraulic systems, powershift transmissions and rear axles with or without immersed brakes of all agricultural machinery, except hypoid gear applications.

SPECIFICATIONS:

API GL-4, John Deere J20C, Case New Holland MAT 3525/3526, Ford WSS M2C 86B/C, \M2C 134D, Massey Ferguson M 1145, 1143, 1141, 1138, 1135, Cat TO-2, ZF TE-ML-03E/05F.













MOTO 4T SR 5W-40

Premium synthetic four-stroke motorcycle oil, designed for high output engines. It offers optimum clutch performance, high lubricity and gearbox wear protection,

SPECIFICATIONS:

API SN, JASO Ma2









SAE 5W-40 415161

415221



MOTO 4T GT 10W-40 / 15W-50

Semi-synthetic four-stroke motorcycle oils, designed for modern engines and large-sized scooters. They offer optimum clutch performance, high lubricity and gearbox wear protection.

SPECIFICATIONS:

API SN, JASO Ma2







SAE 10W-40 418161 SAE 15W-50 416161 416221

416801



MOTO 4T ML 20W-50

High quality, multi-grade, four-stroke motorcycle oil. It offers engine protection and reliable clutch performance.

SPECIFICATIONS:

API SN, JASO Ma2







SAE 20W-50 414161

414221

414801



TWO-STROKE ENGINE LUBRICANTS





















SYN MIX PLUS

Premium quality, semi-synthetic two-stroke engine oil designed for use in high demand engines. It offers smoke reduction, deposit control and exhaust blocking prevention. It meets the demanding Husqvarna HVA 346 and 372 tests. It is ideal for 2-stroke racing motorbikes. chainshaws and lawn cutters. Dilution ratio 1:50

SPECIFICATIONS:

API TC, JASO FD, TISI, ISO-L-EGD. Husqvarna HVA 346 & 372







407801 407221

SYN MIX

Semi-synthetic two-stroke engine oil designed for use in high demand engines. It offers smoke reduction, deposit control and exhaust blocking prevention. Suitable for 2-stroke motorcycles, chainshaws and lawn cutters. Dilution ratio 1:50

SPECIFICATIONS:

API TC, JASO FD, TISI, ISO-L-EGD.







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MIX 2T

Mineral two-stroke engine lubricant for low performance and low capacity engines. Dilution ratio 1:25 - 1:50

SPECIFICATIONS: JASO FB, ISO-L-EGB









411701 411161

411221

411801

CHAINLUB

Special non-dripping oil designed for the lubrication of the chain and guide bar of chainshaws. It protects from wear and rust. It's high tackiness performance prevents dripping and high oil consumption.







406161 406221

406801

MARINE 4T FCW 10W-40

Synthetic multi-grade engine lubricant specially designed for the new generation four-stroke outboard marine engines. Excellent corrosion protection in extreme marine conditions. Superior anti-wear protection at high and low speeds.

SPECIFICATIONS:

NMMA: FCW











SAE 10W-40 408161

408441

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408801

MARINE 2T TCW-3

High performance, ashless, semi-synthetic two-stroke engine lubricant, designed for outboard marine engines and jet skis with injection type lubricating systems or pre-mix. Excellent deposit control and wear protection. It keeps engine and spark plugs clean. Red colored.

SPECIFICATIONS: NMMA: TCW-3











TCW-3

412161

412441

412221 412801

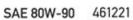
MARINE GREAR 80W-90

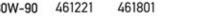
High performance, extreme pressure, multi-grade gear oil designed for the gear boxes and stern drives of outboard and inboard engines. It offers excellent sea water corrosion resistance, load carrying performance and anti-wear protection.

SPECIFICATIONS:



























VERTEX-S TDF 75W-90

Premium synthetic, long life total driveline fluid for heavy duty manual transmissions, axles, drives and differentials. Suitable for use in commercial vehicles, passenger cars, buses and construction machinery. It provides ultimate protection and fuel economy. Ideal for mixed fleets.

SPECIFICATIONS:

API GL4/GL-5/MT-1, MB 235.6, MIL-PRF-2105D, ZF TE-ML 02B, 05B, 07A, 08. 12B.16F,17B, MAN 341 Z2, MAN 342 S2, Volvo 1273.10, Iveco, Eaton.











SAE 75W-90

643161

643221 643801

643911



VERTEX-S LD 75W-80

Premium synthetic transmission fluid, designed for use in synchronised manual and automatic transmissions of modern commercial vehicles using ZF transmissions including those fitted with intarders. It offers excellent syncromesh performance, under high loads and high temperatures for long drain intervals.

SPECIFICATIONS:

API GL-4, MAN 341 E3/Z-4, ZF TE-ML 01L/02L/08/16K, Volvo 97305, Renault, Eaton DAF, IVECO







SAE 75W-80

644221

644801

644911

VERTEX-S MTF 75W-80

Synthetic multi-vehicle manual transmission fluid, specially designed for European and Asian vehicles. It offers superior bearing and gear protection, cleanliness, low temperature performance and robust corrosion protection.

SPECIFICATIONS:

API GL-4. SFU: Mercedes-Benz, VW group, Fiat, Ford, Honda, Hyundai, Nissan. Peugeot, Citroen, Renault, Rover, Jeep, Opel, Toyota, Porche, Suzuki, Volvo.











649221 SAE 75W-80 649161

649801

649911



VERTEX-S MT 75W

Synthetic, ultra fuel economy manual transmission fluid for passenger cars. It ensures optimum operation under high loads, fuel economy, superior viscosity-temperature behaviour and protection against wear. corrosion and sludge formation.

SPECIFICATIONS:

API GL-4. SFU: VW TL 726, VW TL 525 12









SAE 75W

648161

648221

648801

648911



VERTEX-S LS 75W-140

Synthetic, high performance gear lubricant for transaxles and hypoids with and without LS performance, operating under high loads. It offers resistance to shear and ageing, thermal stability and outstanding wear protection. Suitable for long drain intervals.

SPECIFICATIONS:

API GL-5 LS Scania STO:1 SFU:Ford M2C- 192A, BMW, Chrysler, GM.







SAE 75W-140 647221

647801 647911



VERTEX-MTL 75W-90

Semi-synthetic gear lubricant for synchronised manual transmissions of commercial vehicles and passenger cars. It offers excellent gear engagement, wear protection, fuel economy and long drain intervals.

SPECIFICATIONS:

API GL-4, MB 235.5, ZF TE-ML 02D/08, MAN 341/Z2, IVECO, EATON, API GL4/MT1











SAE 75W-90

642161

642221

642801

642911

















VERTEX-VRT 75W-80

Semi-synthetic manual transmission lubricant, designed for use in the PSA group gearboxes. It offers excellent wear protection, EP performance and fuel economy for long drain intervals.

API GL-4/GL-5/MT 1 MIL-L-2105 C&D, PSA (Peugeot, Citroen).







SAE 75W-80 641221

6411801

641911



VERTEX-GL-5 75W-90

Semi-synthetic transmission and axle lubricant for transmissions requesting GL-5 performance level, hypoid gears, drive axles and final drives. It offers wear protection, optimum performance at low and elevated temperatures, and thermal stability for long drain intervals

SPECIFICATIONS:

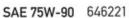
API GL-5/MT 1 MIL-L-2105 D, MACK GO-J







646911



646801

23

VERTEX LS 85W-90

Multi-grade gear oil for axles with differentials equipped with limited slip disks.

SPECIFICATIONS:

GL-5 LS, MIL-L-2105 D, ZF TE-ML-05C/12C/16E









SAE 85W-90 651221

651801

651911



VERTEX GL-5 80W-90 / 85W-140

Multi-grade gear oils for transaxles and hypoids operating under high loads. They offer resistance to shear and outstanding wear protection. Suitable for highly loaded gears.

SPECIFICATIONS:

API GL-4/GL-5/MT-1, MIL-L-2105 D













SAE 80W-90 631161 SAE 85W-140

631441

631221 632221

631801 632801

631911 632911



VERTEX GL-4 80W-90

Multi-grade gear oil for synchronised manual transmissions of passenger cars and commercial vehicles. It offers anti-wear, anti-rust and oxidation protection.

SPECIFICATIONS:

API GL-4, MIL-L-2105











SAE 80W-90 624161

624441

624221

624801

624911



VERTEX GL-4 80W / 90 / 140

Mono-grade gear oils for synchronised manual transmissions of passenger cars and commercial vehicles, they offer anti-wear, antirust and oxidation protection.

SPECIFICATIONS:

API GL-4, MIL-L-2105





622801



SAE 80W SAE 90 **SAE 140**

621221 622221 623221

621801 621911 623801

















VERTEX GL-1 80W / 90/ 140

Mono-grade gear oils for gear boxes and differentials operating at mild load/low speed conditions.

SPECIFICATIONS: API GL-1









611911

SAE 80W SAE 90 6121161 612441 612221 612801 612911 **SAE 140** 6131161 613441 613221 613801 613911

AUTOMATIC TRANSMISSION FLUIDS



ATF MF

High performance, low viscosity, synthetic multi-vehicle ATF, specially designed for modern 6+ speed transmissions. It offers smooth gear shifting, anti-sudder durability, oxidation stability and extended transmission life.

SPECIFICATIONS:

Ford ML-V, GM D VI, Hyundai-Kia SP-IV, NISSAN Matic S, Toyota WS, Honda ATF Z-1, MB 236,14.



5101161





510221

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ATF CVT

High performance, synthetic ATF specially designed for continiously variable transmissions (CVT), operating with steel belts or chains. It offers optimum anti-wear protection and stable friction performance.

SPECIFICATIONS:

Audi Multitronic, BMW Mini Cooper EZL 799/799A/ZF CVT V1, . Daihatsu AMMIX CVTF DFE/CVT Fluid DC/TC, Dodge/Jeep/Chrysler NS-2 & CVT+4, GM DEX-CVT, Honda HMMF/Z-1, Hyundai/Kia CVT-J1/SP III (CVT model)Idemitsu CVTS-EX1, Mazda JWS 3320, Mini Cooper EZL 799/EZL 799A/ZF CVT V1, Mitsubishi CVTF-J1/J4 and -J4+, Mitsubishi SP-III (CVT model only), Nissan NS-1, -2, -3, Punch CVT, Shell Green 1V, Subaru iCVT/iCVT FG/ECVT/chain CVT, CVT II & (HT) CVT Fluid, Subaru NS-2, Suzuki CVTF TC & CVTF 3320.







519801

519161

519221



High performance, synthetic ATF specially designed for dual clutch transmissions (DCT), equipped with wet type clatches. It offers shudder free operation with sufficient torque capacity, prevents gear pitting. protects copper parts from corrosion, and improves shift performance.

SPECIFICATIONS:

Suitable for use in all wet cluch transmissions of Audi, BMW, Citroen, Ford / Getrag, Mitsubishi, Peugeot, Porsche (DCT transmision), Skoda, SEAT, Volvo cars, VW.







523161

523801 523221

ATF HD

High performance, semi-synthetic ATF designed for Heavy Duty transmissions of buses and trucks. It is also suitable for passenger cars requiring a high viscosity ATF. It offers optimum performance and covers the requirements of most OEM's.

SPECIFICATIONS:

ZF-TE-ML 03D/14B, Voith H55.6335, MAN 339 Type V1/Type Z1, MB 236.9, Volvo 97340,97341, Allison C-4, Ford M, GM Dexron III H+.





515221

515801























ATF D III

Semi-synthetic transmission fluid suitable for most automatic transmissions, clutches and steering systems in passenger cars, commercial trucks and off-road machinery. It offers smooth performance and oxidation stability.

SPECIFICATIONS:

GM DEXRON IIIG/H, ALLISON C-4, MERCON, VOITH G 607, MB 236.9, ZF-TE-ML 14





522441





D III

522161

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POWER STEERING FLUID

Semi-synthetic power steering fluid suitable for most European. American and Asian OEM steering system applications in passenger cars, commercial trucks and off-road machinery. It reduces pump squeal and wear.

SPECIFICATIONS:

GM 9985011, FORD-ESW-M2C-128-D, FCA MS-5932, VW-TL-570-26.









PS FLUID 5201161 520441

520221

520801



ATF D II

Automatic transmission fluid suitable for transmissions requesting a Dexron II quality level, clutches and steering systems in passenger cars, commercial trucks and off-road machinery.

SPECIFICATIONS:

GM DEXRON II D. ALLISON C-4, CAT TO-2, VOITH, MB 236.7, RENK , ZF-TE-ML 09/11/14, MAN 339-D





DII

521221

521801

ENGINE COOLANTS & SPECIAL FLUIDS

ENGINE COOLANTS



ANTIFREEZE BS

Concentrated antifreeze for the cooling system of engines. It is free from amines and nitrates. It is diluted with water.

SPECIFICATIONS:

DEUTZ DQC CA-14, Fiat 9,55523, Ford ESD-M97B49-A, Opel-GMEvL1301, JI Case JIC-501, VAG TL-774 C, MAN 324 Typ NF. Complies with Standards: ASTM D3306, BS 6580, NC 956-16, NFR 15-601, JIS K2234, SAE J1034, UNE 26-361-88/1.











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901801 901911



ANTIFREEZE G-12

Concentrated antifreeze for the cooling system of modern high performance aluminum engines. It meets the latest manufacturers' requirements. It is based on organic acid technology and is free of phosphates, nitrates, borates, amines and silicates. It is diluted with water.

SPECIFICATIONS:

Ford WSS-M97B44-D, Mercedes-Benz 325.3, Renault 41-01-001, General Motors GM 6277M, Volkswagen VAG TL 774 D & F, MAN 324 SNF. Complies with Standards: ASTM D3306 (USA), ASTM D4656 (USA), BS 6580: 1992 (UK), AFNOR NF R15-601 (France), AS 2108 (Australia), SAE J 1034, FFV Heft R443. CUNA NC 956-16, UNE 26361-88, NATO S 759













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902911











205Lt PACKAGING





ALL WEATHER

Diluted, ready-to-use, antifreeze liquid for the cooling system of engines. It is free from amines and nitrates.

Antifreeze protection: -27 C.

SPECIFICATIONS:

DEUTZ DQC CA-14, Fiat 9,55523, Ford ESD-M97B49-A, Opel-GMEvL1301, JI Case JIC-501, VAG TL-774 C, MAN 324 Typ NF, Complies with Standards: ASTM D3306, BS 6580, NC 956-16, NFR 15-601, JIS K2234, SAE J1034, UNE 26-361-88/1.









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G-12 RADIATOR FLUID

Diluted, ready for use antifreeze for the cooling system of modern high performance aluminum engines. It meets the latest manufacturers' requirements. It is based on organic acid technology and is free of phosphates, nitrates, borates, amines and silicates. It is diluted with water.

SPECIFICATIONS:

Ford WSS-M97B44-D, Mercedes-Benz 325.3, Renault 41-01-001, General Motors GM 6277M, Volkswagen VAG TL 774 D & F, MAN 324 SNF. Complies with Standards: ASTM D3306 (USA), ASTM D4656 (USA), BS 6580: 1992 (UK), AFNOR NF R15-601 (France), AS 2108 (Australia), SAE J 1034, FFV Heft R443, CUNA NC 956-16, UNE 26361-88, NATO S 759



912161



912441



912221



912801



912911

SPECIAL FLUIDS

DOT-4 BRAKE FLUID

Glycol ether based fluid designed to exceed the requirements of the main internationa brake fluid hydraulic specifications.

SPECIFICATIONS:

SAE J 1704. ISO 4925, FMV SS 116 DOT-4









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922801

FLUSHING OIL

Special lubricant with detergent properties, suitable for internal cleaning of petrol and diesel engines.







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951801 951911

DFI

Oil antifreeze. Prevents the formation of paraffin crystals in the fuel. Recommended use ratio 1:1000







941221 941801

941911



















HYDRO

High performance hydraulic fluids designed to provide ultimate protection and performance in most industrial, marine and mobile equipment aplications. They resist thermal or mechanical breakdown and protect the mechanical parts from wear and deposit formation. They are ideal for hydraulic power systems operating under high pressure

SPECIFICATIONS:

ISO 6743/4 HM. DIN 51524 Part 2 HLP, AFNOR:NFE-48603 HM, Denison Filterability TP 02100, Sperry Vickers I-286-S, US Steel 126, US Steel 127.

SPECIAL HYDRO

High performance, high viscosity index hydraulic fluids designed to provide excellent viscosity control under severe mechanical stress and temperature variations. superior anti-wear protection and performance in most mobile, marine and industrial equipment operating in wide temperature ranges.

SPECIFICATIONS:

HYDRO XP

SPECIFICATIONS:

control.

ISO 6743/4 HV. DIN 51524 Part III HV, AFNOR: NFE-48603 HV, Denison TP 02100, Sperry Vickers I-286-S, US Steel 126, US Steel 127.

Special EP hydraulic fluid, specially designed for hydrokinetic transmission units with integral reduction

gears. It offers high load carrying properties, excellent

oxidation resistance, corrosion protection and foam

713441

ISO 10

ISO 22 ISO 32

ISO 46

ISO 68

ISO 100



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723221

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726801	726991
720801	720991
721801	721991
722801	722991
723801	723991
724801	724991

ISO 15

ISO 22

ISO 32

ISO 46

ISO 68

ISO 100







ISO 32 728221 728801

HYDRO ZF

High performance, zinc-free hydraulic fluids designed to provide ultimate protection and performance in most industrial, marine and mobile equipment aplications. They resist thermal or mechanical breakdown and protect the mechanical parts from wear and deposit formation. They are ideal for hydraulic power systems operating under high pressure

SPECIFICATIONS:

ISO 6743/4 HM. DIN 51524 Part 2 HLP, AFNOR:NFE-48603 HM, Denison HF-0, Sperry Vickers I-286-S, US Steel 126,127,136.

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718221

ISO 46

ISO 68

ISO 46





716801 716911 718801 718911

HYDRO HFC

Superior quality, water-glycol based fluid for use in hydraulic systems where fire resistance is a high priority. It is ideal for use in the steel, aluminum and die-casting industries. It exhibits high shear stability, corrosion resistance and seal compatibility.

SPECIFICATIONS:

ISO L-HFC.

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Environmentally friendly, fire-resistant hydraulic fluids synthetic esters and additives to ensure performance under extreme conditions in iron & steel plants, pipe rolling/press operations and manufacturing industries where the fire risk is high.







32

678801 679801 679911

31

DIN 51517/2 CL, DIN 51524 Part II HLP, ISO 6743/4 HM. NFE 48603 HM. Voith turbo.





728991

HYDRO HFDU

SPECIFICATIONS:

ISO 6743/4 HFDU, ISO 12922

specially formulated by blending carefully selected

ISO 46

ISO 68















LUBRICANTS FOR COMPRESSORS

SYNCOMP DE

High performance synthetic ester-based air compressor lubricants designed for high pressure reciprocating compressors. offering superior anti-wear protection, fast water separation and system efficiency. They are ideal for air breathing systems.

SPECIFICATIONS:

DIN 51506 VDL, ISO/DP 6521-L-DAB-medium & severe duty, EN 12021

SYNCOMP PG

Synthetic, polyglycol-based lubricants for cylinder lubrication of gas compressors. Suitable for reciprocating compressors operating with LPG, LNG and other hydrocarbons. They are also suitable for hydrocarbon process gases, carbon dioxide, hydrogen, helium and nitrogen.



684221

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ISO 68

ISO 100

ISO 220

ISO 150

ISO 32

ISO 46

ISO 68

ISO 100

ISO 32

ISO 46

ISO 68

ISO 100

ISO 150



776801

774801







684801 685801 685911

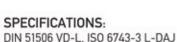
684911

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SYNCOMP

Advanced synthetic PAO-based lubricants designed for use in all types of rotary, vane and screw type compressors. They offer superior performance, wear protection and deposit control for extremely long drain intervals of 10.000 hours



MINERCOMP

High quality zinc-free mineral lubricants designed for use in all types of rotary, vane and screw type compressors. They offer reliable performance, wear protection and deposit control for normal drain intervals.



DIN 51506 VD-L. ISO 6743-3A-DAH



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768801	768911
772801	772911
771801	771911
773801	773911



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787221	787801	787911
783221	783801	783911
781221	781801	781911
782221	782801	782911
784221	784801	784911

RECOM S PE

Advanced synthetic refrigerator compressor fluids formulated with specially selected polyol ester fluids. recommended for open, semi open and hermetic compressors in all types of applications, operating with refrigerants R134A, R23, R404A, R407C, R507 and other HFC blends

SPECIFICATIONS:

DIN 51503 KD

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ISO 32	666221	666801	66691
ISO 36	667221	667801	66791
ISO 68	668221	668801	66891
ISO 100	669221	669801	66991

RECOM AB

Synthetic alkyl benzene based refrigeration compressor lubricants for applications with evaporation temperatures lower than -45 C. They are suitable for rotary or reciprocating compressors using ammonia, CFC, Freon 12, Freon 22, Freon 502 as refrigerants.



DIN 51503 KAA/KC







ISO 46	686221	686801
ISO 68	770221	770801
ISO 100	769221	769801



RECOM S

Synthetic polyalphaolefin based lubricants, suitable for refrigeration compressor systems operating at very high temperatures, and harsh operating conditions in systems with very low evaporation temperatures. Suitable for refrigerants R12, R14. R22 and ammonia.

SPECIFICATIONS:

DIN 51503 KAA/KE, ISO 6743-3A-DAJ

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ISO 32	
ISO 46	
ISO 68	

ISO 32

ISO 46

ISO 68



658801 658911 659801 659911 660801 660911

RECOM M

High quality, hydrotreated, naphthenic based, refrigeration compressor lubricants suitable for rotary or reciprocating compressors using ammonia, CFC, Freon 12, Freon 22, Freon 502 as refrigerants.



DIN 51503 KC/KA, BS 2626/92



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777801 778801 778911 780801 780911











ISO 32

ISO 46

ISO 68

ISO 100

ISO 150

ISO 220

ISO 320

ISO 460

ISO 680









INDAGEAR SYN PG

Synthetic, polyalkelene glycol based industrial gear lubricants. They offer extremely long drain intervals, energy saving, resistance to micropitting, oxidation stability at elevated temperatures, and excellent protection at high load conditions.

SPECIFICATIONS:

DIN 51517 Part III, ISO 12925 CSPG, CTPG, David Brown Type G, SEB 181 226, ANSI/AGMA 9005-F16, Flender T 7300 A & B.

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ISO 150

ISO 220

ISO 320

ISO 460



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661801	661911
662801	662911
663801	663911

664911

INDAGEAR SYN P

Synthetic, PAO based industrial gear lubricants. They offer extremely long drain intervals, resistance to micropitting, oxidation stability at elevated temperatures, and excellent protection at high load conditions.

SPECIFICATIONS:

DIN 51517 Part III (CLP), US STEEL 224, AGMA 9005/E02: EP, FLENDER AG, ISO 12925-1 Type CKD







ISO 68	670221	670801	670911
ISO 150	671221	671801	671911
ISO 220	672221	672801	672911
ISO 320	673221	673801	673911
ISO 460	674221	674801	674911

INDAGEAR

High quality, mineral, extreme pressure (EP) lubricants designed for use in heavy duty industrial gear boxes and bearings. They offer excellent wear and corrosion protection, high load performance and low foaming tendency.

SPECIFICATIONS:

DIN 51517 Part III (CLP), US STEEL 224, AGMA 9005/E02: EP, FLENDER AG, ISO 6743/6 CKC.







ISO 68	731221	731801	731911
ISO 100	732221	732801	732911
ISO 150	733221	733801	733911
ISO 220	734221	734801	734911
ISO 320	735221	735801	735911
ISO 460	736221	736801	736911
ISO 680	737221	737801	737911
ISO 1000	738221	738801	738911

LUBRICANTS FOR CIRCULATING SYSTEMS AND BEARINGS

CIRCULAR B

Mineral lubricants suitable for general lubrication applications, circulation systems, vacuum pumps and gear boxes operating at low pressure. Recommended for general lubrication applications, circulation systems, lubrication tools and simple hydraulic applications.

SPECIFICATIONS:

DIN 51524 Part 1 HL, DIN 51517 Part 1 CL

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751801	751911
752801	752911
753801	753911
754801	754911
755801	755911
756801	756911
757801	757911

758911

759911

LUBRICANTS FOR METALWORKING APPLICATIONS

SYNCUT 60

High performance synthetic metalworking fluid for grinding and machining operations of ferrous and non-ferrous materials. It forms a clear and stable solution that allows full visibility. It exhibits strong bacterial resistance. It is boron and secondary amine free.







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SYNCUT 57

Synthetic base metalworking fluid designed to form a stable translucent microemulsion when mixed with water. Suitable for machining, cutting, drilling and grinding operations. It offers high lubricity and prolonged tool life. It is clorine and amine free. Dilution concentrations 4-10%.



744221





744801 744911



Water repellent and rust protective liquid with strong anti-

corosion properties, designed for application in the steel

industry, where corrosion protection of metal surfaces for long

periods of storage is required. It forms a soap type film with

enhanced anti-rust performance after solvent evaporation.

High quality, multi-purpose neat cutting oils for machine

working of ferrous and non-ferrous metals and their alloys.

They offer excellent tool wear protection. Due to the special

anti-corrosion and anti-oxidant additives, they are suitable for















SYNCUT 40

Synthetic base metalworking fluid designed to form a stable translucent microemulsion when mixed with water. Suitable for machining, cutting, drilling and grinding operations. Ensures rapid settlement of metallic fines. It is clorine and amine free. Dilution concentrations 4-10%.







748801

748221

748911

SYNCUT TD

Synthetic base metalworking fluid designed to form a stable, microemulsion when mixed with water. It is designed for metal forming operations. It is ideal for steel shaping in tube forming industry. It is free of clonine and secondary amines. Dilution concentrations 4-10%







749221 749801



ULAR PLUS

Mineral metalworking fluid designed to form stable milky emulsions when mixed with water. It has good bacteria resistance. Suitable for all kinds of metalworking operations. Dilution concentrations 3- 10 %







740911

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Low viscosity, high purity and a high flash point oil which is used in metalworking and aluminum foil finishing. It is also used in electrical discharge machines (EDM).



ISO 22

ISO 32

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743221

955801

955911

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742911

743911



742801

743801



705221

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705911

STAMPING FLUID 65

RUSTPRO DW 40

STELCAT

yellow metal operations.

ROLLING OIL

High purity and low viscosity special fluid for use in stamping applications in metal forming. It is suitable for unplated steel, zinc coated steel and yellow metals.



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706801 706911

RUSTPRO DW 25

Water repellent and rust protective liquid for metal surfaces, designed for application in the steel industry, where corrosion protection for medium periods of storage is required.







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954801

RUSTPRO DW 30

Water repellent and rust protective liquid for metal surfaces, designed for application in the steel industry, where corrosion protection for long periods of storage is required. It forms a strong wax type film after solvent evaporation.







952801

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37 38















LUBRICANTS **FOR AIR TOOLS**

AIRTOOL

Mineral lubricants for use in rock drilling air tools that operate under high pressure and high temperatures. They are suitable for use in rock drill, cutting air tools and pneumatic tools. They form a high strength oil film. and offer anti-wear and corrosion protection.



ISO 46

ISO 68

ISO 100

ISO 22

ISO 32

LD

MD







701801 701911 701221 702911 702221 702801 703911 703221 703801

LUBRICANTS FOR THE TEXTILE INDUSTRY

TEXTOIL

Specially formulated mineral lubricants for the lubrication of knitting and sewing machines including needles, sinkers, cams, needle and sinker cylinders and spinning rings. They exhibit oxidation resistance, non dripping properties and easy scouring.









730801 730221 741221 741801

730911 741911

LUBRICANTS FOR CONCRETE MOULDS

BT SOLUBLE OIL

Emulsifiable mineral lubricant for concrete moulds. It is suitable for both wooden and metallic casts.







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MOULD OIL LD / MD

Low viscosity special fluids for the coating of metal moulds used in concrete forming. They help detachment due to the chemical action developed on the surface between concrete and metal. They may also be effectively used in wooden or plastic moulds.



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748221







747801 748801

747911 748911

LUBRICANTS FOR SLIDEWAYS

GARAN

High performance mineral lubricants with adhesion additives for the lubrication of industrial sliderways. They offer excellent separation from cutting emulsions, superior frictional performance and high antiwear and anti-corosion behaviour.



DIN 51502 CGLP, ISO 6742-13 GA/GB

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ISO 68	762221	762801	762911
ISO 220	763221	763801	763911
ISO 320	765221	765801	765911
ISO 460	764221	764801	764911

LUBRICANTS FOR AIR AND GAS TURBINES

TURBINE F

Mineral lubricants with excellent demulsifying properties, for steam and light duty gas turbines. They offer excellent rust and corrosion protection, and superior oxidation stability.

SPECIFICATIONS:

DIN 51515 Part 1 L-TD & Part 2 L-TG, ISO L-TGA (ISO 8068:2019)

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SO 32	790221	790801	790911
SO 46	791221	791801	791911
SO 68	792221	792801	792911
SO 100	793221	793801	793911

LUBRICANTS FOR HEAT TRANSFER

TRANSTHERM A / B

High quality oils for heat transfer systems operating between 10 and 320 C. They have high thermal conductivity and oxidation resistance.



795221

797221

A (ISO 32)

B (ISO 68)







Inhibited electrical insulating oil produced from severely

hydrotreated naphthenic base oils meeting IEC 60296-2012

excellent dielectric strength, low temperature performance,

Edition 4.0 Standard table-2 General Specifications. It has













LUBRICANTS FOR INDUSTRIAL CHAINS



CHAIN OIL T

High quality, solvent based lubricant for industrial drive and transport chains. It contains special soap and polymer type additives for effective lubrication and anti-wear protection.







799801 799911 799221





798221 798801

CHAINLUB HT 220

LUBRICANTS

QUENCHING OIL

FOR METAL QUENCHING

minimum deformation and decoloration.

High performance synthetic ester based, chain lubricant designed for lubrication of high temperature conveyor chains at temperatures up to 290°C. It is suitable for use in fiber glass, particle board production etc. It offers high anti-wear protection, low deposit formation and reduced lubricant consumption.

High quality parafinic mineral lubricants blended with

special additives for steel quenching in oil baths operating at temperatures between 20 and 60 C. They ensure



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796801

ISO 22

ISO 32





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6811911

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LUBRICANTS FOR THE FOOD INDUSTRY

FG HYDRO

LUBRICANTS

FOR TRANSFORMERS

TRANSFORMER OIL A

and cooling properties.

SPECIFICATIONS: IEC 60296 -2012 (ed. 4)

High performance, non-toxic, hydraulic lubricants designed for use in equipment for processing and packaging of food. beverages and pharmaceuticals. The FG HYDRO series is based on a selection of suitable base oils and special additives in order to meet the strict requirements of the food industry.

SPECIFICATIONS:

NSF Cat. H1 Reg. Nr 164562 NSF Cat. H1 Reg. Nr 164563



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691221

ISO 46

ISO 68



690801

691801



690911

691911

























FG GEAR-S

Synthetic, non toxic, PAO based industrial gear lubricants designed for use in equipment for processing and packaging of food, beverages and pharmaceuticals. They offer long drain intervals, resistance to micropitting. oxidation stability at elevated temperatures, and excellent protection at high load conditions.



SPECIFICATIONS:

NSF Cat. H1 Reg. Nr 164564 NSF Cat. H1 Reg. Nr 164565

FG COMPRESSOR S



964221

965221



964801

965801





964911 965911

GREASES FOR THE FOOD INDUSTRY

FG-2

Special inorganic base (bentonite) grease for food grade applications. It is formulated with high purity mineral white oils.

SPECIFICATIONS:

DIN 51825 : KP2 R-20





871201 871801

ISO 220

ISO 320

ISO 46

ISO 100

Synthetic, non toxic, PAO based compressor lubricants designed for use in equipment for processing and packaging of food, beverages and pharmaceuticals. They are formulated with seleted additives in order to meet the strict requirements of the food industry.



NSF Cat. H1 Reg. Nr 164566 NSF Cat. H1 Reg. Nr 164567



962221

966221



962801

966801



962911

966911

FGA-2

FGA-2 is an aluminium complex thickened lubricating grease based on pharmaceutical grade oils and polymers. It contains antioxidants and EP/AW additives.

SPECIFICATIONS:

ISO 12924: L-XB(F)CDB2, DIN 51502: KP2K-20 NSF Cat. H1 Reg. Nr 161278





876201 876801













LITHIUM BASE **GREASES**



AUTOGREASE

High performance semi-fluid grease for automotive centralised lubrication systems. It offers optimum low temperature pumpability over long distances.







NLGI 00

810441 810201 810801

COTTONLUB

SPECIFICATIONS:

DIN 51825 KP 00K-20

SPECIFICATIONS:

DIN 51825 GP00-K-20

High performance semi-fluid grease for cotton harvesting machines. It offers optimum low temperature pumpability and untroubled operation during harvesting period.





811801

NLGI 00

811201

LS

Multi-purpose lithium base greases with anti-wear properties for general lubrication. They are suitable for most lubrication requirements of vehicles and for general industrial use.









SPECIFICATIONS: DIN 51825 K0 K-30 DIN 51825 K1 K-30

DIN 51825 K2 K-30 DIN 51825 K3 K-20

NLGI 0 NLGI 1 NLGI 2 NLGI 3

821161 821441 821201 822161 822441 822201

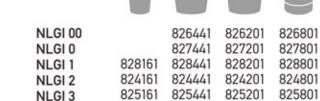
823201 820801 820201 821801 822801

LS EP

Lithium-based greases for general use with extreme pressure (EP) additives for general lubrication. They cover most EP lubrication requirements in industry. agricultural vehicles and machinery. They are suitable for ball bearing lubrication. They are also used in centralized lubrication systems (LS EP-00)

SPECIFICATIONS.

SELCIFICATIONS:
DIN 51825 KP00 K-30
DIN 51825 KP0 K-30
DIN 51825 KP1 K-30
DIN 51825 KP2 K-30
DIN 51825 KP3 K-20



LS OG

Lithium-based grease with graphite for lubrication of open surfaces and open gears . It offers excellent adhesion, water resistance and dry lubrication upon grease removal.

SPECIFICATIONS: DIN 51825 OG PF2 N-30



NLGI 2



829201

LS-2 MO

Multi purpose lithium based grease with Molybdenum disulfide (MoS2). It is suitable for general lubrication of vehicles and off-road equipment operating with vibrations. It offers efficient dry lubrication upon grease removal.

SPECIFICATIONS:

DIN 51825 KPF2 K-30

NLGI 2

841121





841161 841441 841201







CALCIUM BASE **GREASES**



CS

Calcium based greases with good adhesion to metal surfaces and high resistance to water washout. They are suitable for the lubrication of the frame (chassis) of vehicles and agricultural machinery.

SPECIFICATIONS:

DIN 51825 K1 E-20 DIN 51825 K2 E-20 DIN 51825 K3 E-20

CS-2 G

Calcium based grease with graphite for moderate temperature applications on sliding surfaces and joints. It offers dry lubrication upon grease removal.

SPECIFICATIONS:

DIN 51825 KF2 E-20

CSA-2

Anhydrous calcium base grease with excellent adhesion to metal surfaces and high washout resistance. It is suitable for the lubrication of vehicle chassis, agricultural machinery and general low pressure applications with operating temperatures up to 100 C.

SPECIFICATIONS:

DIN 51825 K2 G-20









831801

832801

NLGI 1 830201 831201 831161 831441 NLGI 2 832441 832201 NLGI 3 832161







NLGI 2

851201

851801



NLGI 2 894201

894801

CALCIUM SULPHONATE **COMPLEX GREASES**

CSX

New generation, high performance, multi-purpose calcium sulphonate complex greases, suitable for severe applications demanding very high load-high temperature properties, corrosion and water resistance, exellent adhesion and thermal stability. They can be used in heavy duty bearings, axles, ball joints, chains, cables etc.

SPECIFICATIONS:

DIN 51825 KP0/1 P-30 DIN 51825 KP1/2 P-30 DIN 51825 KP2 P-30



NLGI 0/1 NLGI 1/2 NLGI 2

834201 833201 835201

834801 833801 835801

HAMMER PASTE

HAMMER PASTE is a unique product designed for the lubrication of hydraulic breakers. It is based on the calcium sulfonate thickener technology. Copper, graphite and other high-performance additives are incorporated in order to strengthen the friction reducing film and prevent metal-to-metal contact between the hammer's tool and the upper and lower tool bushings.









893651 893161 893201 893801











NLGI 2

NLGI 2

NLGI 0





LITHIUM COMPLEX **GREASES**



LS COMP

High performance lithium complex greases with EP additives, suitable for a wide range of general purpose applications demanding EP and high temperature properties. They can be used in heavy duty wheel bearings, axles, ball joints, chains, cables etc.

CDECIFICATIONS

SPECIFICATIONS:							
DIN 51825 KP00 P-30	NLGI 00				857201	857801	
DIN 51825 KP0 P-3	NLGI 0				858201	858801	
DIN 51825 KP1 P-30	NLGI 1				859201	859801	
DIN 51825 KP2 P-30	NLGI 2	861121	861161	861441	861201	861801	
DIN 51825 KP3 P-30	NLGI 3			862441	862201	862801	

LS-0 COMP ARCTIC

Premium quality, high performance lithium complex grease containing 5% Molybdenum disulfide, specially developed for universal application in construction machinery operating at very low temperature conditions. It offers corrosion and water resistance, excellent adhesion and load carrying capacity.

SPECIFICATIONS:

DIN 51825 KPF 0 K-50





860801

NLGI 0

NLGI 2

860201

LS-2 COMP MO

Heavy duty, extreme pressure, lithium complex soap grease with MoS2 suitable for slow moving heavily loaded large bearings subject to shock loads. It exhibits excellent mechanical stability under vibrating conditions, water resistance and superior dry lubrication.



DIN 51825 KPF2 P-30





866201 866801

LS-2 COMP V

Heavy duty, extreme pressure, lithium complex soap grease, formulated with with high viscosity base oils, suitable for slow moving heavily loaded large bearings. It offers excellent mechanical stability, superior extreme pressure performance and water resistance.

SPECIFICATIONS:

DIN 51825 KP2 P-20



867201

LS-2 COMP MO HV

LS-2 COMP Mo HV is a high-performance grease, combining the advantages of high viscosity base fluids with high quality lithium complex soaps. The lithium complex thickener provides excellent adhesion. structural stability and water resistance and additionally it contains 5% MoS2 to provide resistance to shock loads



DIN 51825 KPF2 P-20

LS-OG-OH

Open gear grease, developed specifically for use on heavy duty mining and industrial equipment. It forms a tough lubricating film on the friction surfaces which is resistant to pressure and shock loads as well as unfavorable conditions. The base oil selected is consisted of highly refined paraffinic base stocks and thickeners, with excellent chemical and thermal stability. Compounded to flow readily in the film forming process.

SPECIFICATIONS:

DIN 51502 OGPF 0 G-20





883201

883801















LS-2 COMP VL

Heavy duty, extreme pressure, lithium complex soap grease, developed with high viscosity base oil in combination with Teflon and other solid EP additives. It offers excellent mechanical stability, superior extreme pressure performance and water resistance. Working temperatures -25 to +150oC.





SPECIFICATIONS: DIN 51825: KP2, R-25

NLGI 2

894801 894201

MIXED SOAP **GREASES**

LCS-EP

Versatile water resistant and extreme pressure greases, based on Lithium-Calcium soap for medium to high speed bearings operating in wet environments. Suitable for agricultural and construction equipment.

SPECIFICATIONS:

DIN 51825 KP1 K-20 DIN 51825 KP2 K-20 DIN 51825 KP3 K-20



836121

NLGI 1

NLGI 2

NLGI 3



836161 836441

837161 837441





838201

836201

837201



838801

836801

837801

INORGANIC BASE GREASES

BNT-2

Special inorganic base type (bentonite) grease with high viscosity base oils for elevated operating temperatures. Designed to provide low volatility, high resistance to oxidation and excellent stability at high temperatures.

SPECIFICATIONS:

DIN 51825 : KP2 R-20

NLGI 2



872201 872801

COPPER PASTE

High quality anti-seize compound, formulated with a bentone clay thickener, micro-copper flakes and graphite. It is suitable for threaded connections in automotive and industrial applications. It prevents galling on assembly and provides reduced dismantling torque. Anti-seize protection up to 1100 C.





NLGI 2

892201 892801

POLYUREA GREASES

LPU-2

High performance, polyurea thickened grease for high speed, high loaded rolling bearings of electrical motors and similar applications. It provides long rolling bearing life, thermal stability, and protection at elevated temperatures and wet conditions.





NLGI 2

NLGI1/2

NLGI 2

891801 891201

SYNTHETIC **GREASES**

SPECIFICATIONS:

DIN 51825 : KP2 P-20

LS COMP SYN

Superior quality, PAO based, synthetic lithium complex soap greases, combining the advantages of polyalpaolephine synthetic base fluids with high quality lithium complex soaps. It provides excellent low temperature pumpability, thermal and oxidation stability, anti-wear protection, very low starting and running torque. The lithium complex thickener provides excellent adhesion, structural stability and water resistance.





882201

881801 882801

52

SPECIFICATIONS:

DIN 51825: KPHC 1/2 N-40 DIN 51825: KPHC 2 N-30





MARITIME 430 / 440

Mineral lubricants for crancase lubrication in cross-head marine engines.

SPECIFICATIONS:

SAE 30 SAE 40

MARITIME 1230 / 1240 / 1250

High quality lubricants for trunk piston engines operating on distillate fuels and light fuel blends.

SPECIFICATIONS:

API CF, TBN 12

MARITIME 3030 / 3040

High quality lubricants for trunk piston engines operating on up to 2% sulphur fuels.

SPECIFICATIONS:

API CF, TBN 30



SAE 30

SAE 40

SAE 30

SAE 40

SAE 50

SAE 30

SAE 40

431221

441221

451221







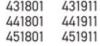
















432801 432911 442801 442911













STERNTUBE OIL

High performance oils for stern tube lubrication. They emulsify contaminating water and offer corrosion protection, seal compatibility and effective lubrication.

SPECIFICATIONS:

API CF, TBN 12

ISO VG 100	

ISO VG 320

ISO VG 460



SAE 50

SAE 50



449911 448911 450911

din

MARITIME 4050 / 5070

High quality, high alkalinity mineral lubricants for cylinder lubrication in cross-head marine engines operating on high sulphur content fuels.

SPECIFICATIONS:

TBN 40 TBN 70





452801 452911 453801 453911

API ENGINE OIL CLASSIFICATION

PETROL ENGINES

Category	Status	Service
SP	CURRENT	Introduced in May 2020, designed to provide protection against low-speed pre- ignition (LSPI), timing chain wear protection, improved high temperature deposit protection for pistons and turbochargers, and more stringent sludge and varnish control. API SP with Resource Conserving matches ILSAC GF-6A by combining API SP performance with improved fuel economy, emission control system protection and protection of engines operating on ethanol- containing fuels up to E85.
SN	CURRENT	For 2020 and older automotive engine
SM	CURRENT	For 2010 and older automotive engine
SL	CURRENT	For 2004 and older automotive engine
SJ	CURRENT	For 2001 and older automotive engine
SH	OBSOLETE	For 1996 and older automotive engines. CAUTION: Not suitable for use in most gasoline-powered automotive engines built after 1996. May not provide adequate protection against build-up of engine sludge, oxidation, or wear.
SG	OBSOLETE	For 1993 and older automotive engines. CAUTION: Not suitable for use in most gasoline-powered automotive engines built after 1993. May not provide adequate protection against build-up of engine sludge, oxidation, or wear.
SF	OBSOLETE	For 1988 and older automotive engines. CAUTION: Not suitable for use in most gasoline-powered automotive engines built after 1988. May not provide adequate protection against build-up of engine sludge.

ILSAC STANDARD FOR PASSENGER CAR ENGINE OILS

The current and previous ILSAC standards are listed here. Vehicle owners should refer to their owner's manuals before consulting these charts. Oils may have more than one performance level.

For automotive gasoline engines, the latest ILSAC standard includes the performance properties of each earlier category and can be used to service older engines where earlier category oils were recommended.

Name	Status	Service
GF-6A	CURRENT	Introduced in May 2020, designed to provide protection against low-speed pre-ignition (LSPI), timing chain wear protection, improved high temperature deposit protection for pistons and turbochargers, more stringent sludge and varnish control, improved fuel economy, enhanced emission control system protection and protection of engines operating on ethanol-containing fuels up to E85.
GF-6B	CURRENT	Applies only to oils having an SAE viscosity grade of 0W-16. Introduced in May 2020, designed to provide protection against low-speed pre-ignition (LSPI), timing chain wear protection, high temperature deposit protection for pistons and turbochargers, stringent sludge and varnish control, improved fuel economy, emission control system protection and protection of engines operating on ethanol-containing fuels up to E85.
GF-5	OBSOLETE	Use GF-6A where GF-5 is recommended.
GF-4	OBSOLETE	Use GF-5 where GF-4 is recommended.
GF-3	OBSOLETE	Use GF-5 where GF-3 is recommended.
GF-2	OBSOLETE	Use GF-5 where GF-2 is recommended.
GF-1	OBSOLETE	Use GF-5 where GF-1 is recommended.

DIESEL ENGINES

(Follow your vehicle manufacturer's recommendations on oil performance levels)

Category	Status	Service
CK-4	CURRENT	API Service Category CK-4 describes oils for use in high-speed four-stroke cycle diesel engines designed to meet 2017 model year on-highway and Tier 4 non-road exhaust emission standards as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulfur content up to 500 ppm (0.05% by weight). However, the use of these oils with greater than 15 ppm (0.0015% by weight) sulfur fuel may impact exhaust aftertreatment system durability and/or oil drain interval. These oils are especially effective at sustaining emission control system durability where particulate filters and other advanced aftertreatment systems are used. API CK-4 oils are designed to provide enhanced protection against oil oxidation, viscosity loss due to shear, and oil aeration as well as protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits, degradation of low- and high-temperature properties, and soot-related viscosity increase. API CK-4 oils exceed the performance criteria of API CJ-4, CI-4 with CI-4 PLUS, CI-4, and CH-4 and can effectively lubricate engines calling for those API Service Categories. When using CK-4 oil with higher than 15 ppm sulfur fuel, consult the engine manufacturer for service interval recommendations.
CJ-4	CURRENT	For high-speed four-stroke cycle diesel engines designed to meet 2010 model year on-highway and Tier 4 non-road exhaust emission standards as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulfur content up to 500 ppm (0.05% by weight). However, the use of these oils with greater than 15 ppm (0.0015% by weight) sulfur fuel may impact exhaust aftertreatment system durability and/or drain interval. API CJ-4 oils exceed the performance criteria of API Cl-4 with Cl-4 PLUS, Cl-4, CH-4, CG-4 and CF-4 and can effectively lubricate engines calling for those API Service Categories. When using CJ-4 oil with higher than 15 ppm sulfur fuel, consult the engine manufacturer for service interval.
CI-4	CURRENT	Introduced in 2002. For high-speed, four-stroke engines designed to meet 2004 exhaust emission standards implemented in 2002. CI-4 oils are formulated to sustain engine durability where exhaust gas recirculation (EGR) is used and are intended for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, CG-4, and CH-4 oils. Some CI-4 oils may also qualify for the CI-4 PLUS designation.
CH-4	CURRENT	Introduced in 1998. For high-speed, four-stroke engines designed to meet 1998 exhaust emission standards. CH-4 oils are specifically compounded for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, and CG-4 oils.
CG-4	OBSOLETE	For engines designed to meet 1994 exhaust emission standards. CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009.
CF-4	OBSOLETE	Introduced in 1990 for high speed four stroke engines. CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009.
CF-2	OBSOLETE	For 2-stroke diesel engines. CAUTION: Not suitable for use in most diesel- powered automotive engines built after 2009. Two-stroke cycle engines may have different lubrication requirements than four-stroke engines, so the manufacturer should be contacted for current lubrication recommendations.
CF	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009. Later "C" category oils are usually suitable or preferred for diesel automotive engines for which "CF" oils were specified. Older equipment and/or two-stroke diesel engines, especially those calling for monograde products, may however require "CF" category oil.
CE	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
CD-II	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
CD	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
СС	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered engines built after 1990.
СВ	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered engines built after 1961.
CA	OBSOLETE	CAUTION: Not suitable for use in most diesel-powered engines built after 1959.

OEM SPECIFICATIONS

FORD ENGINE OIL SPECIFICATIONS

Ford WSS-M2C913-A

Engine oil. Initial and service fill. SAE 5W-30. This specification meets the ILSAC GF-2 and ACEA A1-98 and B1-98 and additional Ford requirements

The Ford M2C913-B specification is released in Europe for initial fill engine oils used for lubrication of spark ignition engines using gasoline and for compression ignition engines using diesel fuels. The specification is also used to define engine oils for servicing Ford engines where applicable. The oil shall meet all the requirements of the ILSAC GF-2 and GF-3 specification, the ACEA A1-98 and B1-98 specification and additional Ford requirements. Ford WSS-M2C913-C

Fully backwards compatible and is strongly recommended for all applications that currently require the specification Ford M2C913-B. The new engine oil provides various benefits to the customer such as improved fuel economy benefits and high robustness to biodiesel fuels Ford WSS-M2C913-D

Introduced in 2012, oils meeting this specification are recommended for all Ford diesel engines except Ford Ka TDCi models manufactured before 2009 and Ford Galaxy 1.9 TDi models manufactured between 2000 and 2006. A product meeting this specification is especially recommended for diesel engines where M2C913-B or M2C913-C oils were initially required. An oil meeting this specification must be used in Ford Transit vehicles manufactured from 2012 onward with Duratorq 2.2 engine. Oils meeting this specification can be used with extended oil change intervals and are also suitable to be used in engines running on biodiesel or high sulfur diesel.

Ford WSS-M2C917-A

Viscosity SAE 5W40 engine oil for pump injector diesel engines. Ford WSS-M2C934-A

Extended drain engine oil for vehicles equipped with diesel particulate filter (DPF). Ford WSS-M2C937-ASpecial engine oil for Ford Focus RS. Viscosity should be SAE 0W-40.

Ford WSS-M2C948-B

Largely based on the ACEA C2 oil sequence this spec requires a low SAPS 5W20 oil and is primarily designed for the 1.0 liter, 3-cylinder EcoBoost engine. Contains in-house tests for fuel economy and piston deposit control. Oils meeting this spec must provide a 0.9% fuel economy improvement over regular 5W-20 oils

Ford WSS-M2C950-A

Special engine oil for Ford Focus Diesel 2.0 manufatured from September 2014 and Ford Mondeo Diesel 2.0 manufactured from 2015. Viscosity should be SAE 0W-30.

BMW ENGINE OIL SPECIFICATIONS

BMW Longlife-98 (BMW LL-98)

Special long-life engine oil, approved by BMW. Also meets ACEA A3/B3, API SJ/CD, EC SAE 5W-40. Usually required for BMWs manufactured before MY 2002. Obsolete since 2009.

BMW Longlife-01 (BMW LL-01)

Special BMW approval for fully synthetic long-life oil. Product meets ACEA A3/B3 and API: SJ/CD EC-II. Usually required for BMWs built after MY 2002. Can also be used where a BMW Longlife-98 oil is recommended.BMW Longlife-01 FE (BMW LL-01 FE)Fully synthetic long-life oil with fuel economy properties. Oils meeting this specifications must have a low HTHS viscosity to meet the manufacturer's fuel economy requirements. These oils are only suitable for the following engines: N1x, N2x, N54, N55, N63, N74,

BMW Longlife-04 (BMW LL-04)

Special BMW approval for fully synthetic long-life oil, Viscosities are SAE 0W-30, 0W-40, 5W-30 and 5W-40, Usually required for BMWs equipped with a diesel particulate filter (DPF). Can also be used where a BMW Longlife-98 or BMW Longlife-01 oil is recommended.

BMW Longlife-12 (BMW LL-12) Special motor oil for certain approved gasoline engines and the following diesel engines only: Nx7K1, Nx7U1, Nx7U1 from model year 2013. Not suitable for

engines with 2 or 3 turbos.

BMW Longlife-14+ (BMW LL-14+)

Special motor oil for the following gasoline engines only: N20. Bx8 from model year 2014. Not allowed for diesel engines. BMW Longlife 14 FE

Premium lower SAPS lubricants. They are designed for use in the latest BMW gasoline engines and light-duty diesel engines with gasoline or diesel particulate filters. BMW Longlife 14 FE oils are typically low HTHS (≥ 2.65cP) SAE 0W-20 for fuel economy.BMW Longlife 17 FEPremium lower SAPS lubricants. They are designed for use in the latest BMW gasoline engines and light-duty diesel engines with gasoline or diesel particulate filters. BMW Longlife 17 FE oils are typically low HTHS (≥ 2.65cP) SAE 0W-20 and are coupled with ACEA C5 oils. BMW LL 17 FE superceeds LL 14 FE specification

MERCEDES-BENZ ENGINE OIL SPECIFICATIONS

The name of the MB specifications derives from the Mercedes Bluebook scheme, divided by numbered paragraphs and pages. It is used by dealers to identify the products certified by the manufacturer and their correct application on the engines

This specification is required for Mercedes vehicles with gasoline engines supplied by the Renault-Nissan Alliance. Specification requirements are similat to MB 229.5.

MB 226.51

This specification is based on RN0720 and is recommended for Mercedes vehicles with DPF fitted diesel engines supplied by Renault. Oils meeting this specification have very good thermal stability and aftertreatment compatibility

MR 229 1

For petrol and diesel engines. Minimum quality required ACEA A2/B2 with additional limits on engine

MB 229.3

For petrol and diesel engines. Minimum quality required ACEA A3 / B3 / B4 and MB 229.1. It can only certify 0/ 5 W-x oils.

MB 229.31

Multigrade, low SAPS engine oil, advised for both diesel and petrol engines of Mercedes Benz, Smart and Chrysler. Only low viscosity engine oils which can realize a 1,0% saving on used fuel in the M111 Fuel economy test (CEC L-54-T-96) can get this approval. In this test the fuel savings are compared to the performance of the Reference oil RL 191 (SAE 15W-40).

MB sheet for energy conserving oils for certain car and van engines. Approved oils must meet ACEA A3. B3 and B4 specification and some additional demands by Daimler Chrysler AG. Oil must be on the approval list.

MB 229.51

Low SAPS Long Life engine oil for diesel engines with particle filter meeting emission EU-4 -> standards.

MB 229.52

Oils meeting this specifications must have lower ash content, at least 1% better fuel economy compared to the requirements of MB 229.31 and MB 229.51 and better oxidation stability for biofuel compatibility. Can also be used where an MB 229.31 or an MB 229.51 oil is required. Just like MB 229.5 and MB 229.51 this spec requires a long life oil.

MB 229.71

Engine lubricants approved to MB229.71 are premium lower SAPS lubricants typically aligning with a baseline level of performance as defined in ACEA C5-16. They are designed for use in high performance gasoline and light duty diesel engines where advanced aftertreatment systems including as Three-Way Catalysts (TWC), Diesel Particulate Filters (DPFs) and more recently Gasoline Particulate Filters (GPFs) are installed.

For high performance diesel engines.MB 228.3High efficiency lubricants (SHPD) for turbo charged HD diesel engines. Extended drain intervals up to 45.000 km.MB 228.31Similar to 228.3 but for HD diesel engines with Bleutec particulate filters (DPF)

MB 228.5

Ultra high efficiency lubricants (UHPD) for turbo charged HD diesel engines. Extended drain intervals up to 100.000 km.

MB 228.51

Similar to 228.5 but for Euro 4 and newer HD diesel engines with Bluetec particulate filters (DPF).

MB 228.52 is a Top Tier low SAPS lubricant specification designed for use in select Euro VI / US Tier 4 engines used in buses and industrial/off road applications where advanced aftertreatment systems such as Diesel Particulate Filters (DPFs) are fitted

MB 228.52 oils are typically SAE 10W-40, 5W-30 or 10W-30 viscosity grades.

MB 228.52 shares many common characteristics with MB 228.51. The major difference between the two specifications is that MB 228.52 has a restriction on the level of calcium allowed in the lubricant and is designed for use in select applications/engines mentioned above

MB 228.61 is a Top Tier low SAPS lubricant specification designed for use in high performance medium and heavy-duty diesel engines where advanced aftertreatment systems such as Diesel Particulate Filters (DPFs) are fitted. With a HTHS viscosity of 2.9-3.2cP, these lubricants are designed to provide enhanced fuel economy benefits to the latest Daimler OM471A Euro VI engines. MB 228.61 lubricants are typically a SAE 5W-30 (2.9-3.2cP) viscosity grade.

MAN ENGINE OIL SPECIFICATIONS

MAN M 3275

High efficiency lubricants (SHPD) for turbo charged HD diesel engines. Extended drain intervals up to 45.000 km.

MAN M 3277

Ultra high efficiency lubricants (UHPD) for turbo charged HD diesel engines. Extended drain intervals up to 100.000 km. MAN M 3575

Similar to M 3275 but for HD diesel engines with particle filters (DPF). MAN M 3477Ultra high efficiency lubricants (UHPD) for Euro IV and Euro V HD diesel engines equipped with DPF. Extended drain intervals up to 100.000 km.

MAN M 3677

Ultra high efficiency lubricants (UHPD) for Euro VI HD diesel engines equipped with DPF. Extended drain intervals up to 100.000 km and fuel economy.

VW GROUP ENGINE OIL SPECIFICATIONS

VW 500.00

Volkswagen specification for multigrade engine oils for gasoline engines with SAE 5W-X/10W-X viscosity. This is an "old" oil specification and is applicable to engines built before model year 2000 (up to August 1999). Oils with an approval made post March 1997 were given an alternative, later VW specification. VW 501.01

Conventional motor oils suitable for some VW engines built before MY 2000. This is an "old" oil specification and is applicable to engines built before model year 2000 (up to August 1999). Oils with an approval made post March 1997 were given an alternative. later VW specification VW 502.00

Oil for gasoline engines. Successor of VW 501.01 and VW 500.00 specification. Recommended for those which are subject to arduous conditions. It must not be used for any engines with variable service intervals or any which are referred to under other specifications.

VW 503.00 Long-life gasoline engine oil for VW cars with WIV (system for longer service intervals). Also meets ACEA A1, SAE 0W-30 or 5W-30 specification.

This specification is specifically for Audi RS4, Audi TT, S3 and Audi A8 6.0 V12 models with outputs of more than 180bhp, running with variable service intervals (30,000km or 2 years). Now superceeded by the VW 504.00 specification

The VW 504 00 specification superceedes the VW 503 00 and VW 503.01 specifications. VW 504 00 oils are suitable for engines meeting the demands of Euro IV emissions standards.

VW 505.00

Passenger car diesel engine oil specification, minimum performance level CCMC PD-2. Lists viscosities SAE 5W-50, 10W-50/60, 15W-40/50, 20W-40/50 requiring 13% max. evaporation loss and SAE 5W-30/40, 10W-30/40 requiring 15% max. evaporation loss.

VW 505.01 Special engine oil for VW turbodiesel engines with pump-injector-unit and for the V8 Commonrail turbodiesel engines. Meets ACEA B4 SAE 5W-40

specification VW 506.00

> These oils are suitable for diesel engines with extended service intervals of up to 50.000km / 2 years. Not for use on engines with a single injector pump. Oil change is indicated by the electronic service indicator. Viscosity is SAE 0W30.

VW 506.01

These oils are especially for "Pumpe-Düse" (unit injector or "PD" engines) running on extended service intervals (30,000 - 50,000km / 24 months). Oil change is indicated by the electronic service indicato VW 507.00

Low SAPS oils suitable for Euro 4 engines and almost all VAG diesel engines from 2000 onwards with extended service intervals, unitary injector pumps and also Pumpe-Düse ("PD") engines. Excludes V10, R5 engines and VW Commercial vehicles without fitted DPF (diesel particulate filters) - these must use a 506 01 specification oil.

VW 508.00/509.00

This specification combo (508.00 for petrol, 509.00 for diesel) requires a 0W20 viscosity, fuel economy oil with long life additives. These specifications are NOT backward compatible with the earlier VW specifications. Recommended for the new 2.0 TFSI 140 kW and 3.0 TDI CR 160 kW VW/Audi engines.

PSA GROUP ENGINE OIL SPECIFICATIONS

The French PSA group issued a set of oil specifications in 2009 in order to exercise greater control over the motor oils used in their vehicles. All specifications are based on ACEA specs but also require further conditions to be met.

PSA B71 2290

Peugeot/Citroën engine oil specification introduced in 2009. B71 2290 is a low-SAPS oil intended for engines with diesel particulate filters and with Euro 5 emission standards. General specifications are: ACEA C2 or C3 with additional PSA tests. PSA B71 2294

Peugeot/Citroën engine oil specification introduced in 2009. Main specification: ACEA A3/B4 with additional PSA tests.

PSA B71 2295

Peugeot/Citroën engine oil standard for engine before MY 1998. General specification: ACEA A2/B2.

PSA B71 2296

Peugeot/Citroën engine oil specification introduced in 2009. General specifications: ACEA A3/B4+ additional PSA tests.

PSA B71 2312

Peugeot Citroën has developed B71 2312 standard for oils able to endure the most severe thermal constrains along with most modern after treatment systems compatibility. The PSA B71 2312 standard applies to all Peugeot and Citroe'n vehicles equipped with "BlueHDi" Diesel engines fitted with SCR (Selective Catalyst Reduction) allowing NOx (Nitrous oxides) treatment through the use of AdBlue® additive or so-called "diesel exhaust fluid". The standard also requires improved cold flow properties to reduce hydrodynamic friction of the oil. in order to obtain fuel economy benefits especially when the oil is cold. This extra requirement for cold flow properties allows excellent oil flow at start up, faster oil pressure build up, faster revs raisings and faster operating temperature reach. This type of low viscosity lubricant allows fuel consumption reduction and therefore reduces greenhouse gases (CO2)

RENAULT GROUP ENGINE OIL

Renault Rn0700

Renault engine oil specification: introduced in 2007 upon introduction of the Laguna III. General requirements: ACEA A3/B4 or ACEA A5/B5. Renault Rn0710

SPECIFICATIONS PASSENGER CARS

Renault engine oil specification: introduced in 2007 upon introduction of the Laguna III. General requirements: ACEA A3/B4 + additional Renault demands. Renault Rn0720 Renault engine oil specification: introduced in 2007 upon introduction of the Laguna III. General requirements: ACEA C3 + additional Renault demands.

RN0720 is designed for use in the latest generation diesel engines equipped with DPF. Renault Rn17

Renault RN17 is the latest 5W-30 mid SAPS service fill specification for gasoline and EURO 6 diesel vehicles. Renault has simplified their list of specifications by replacing their older specifications, RN700 and RN710, with RN17. The specification has been designed for turbocharged gasoline direct (TGDI) engines and includes gasoline particulate filter (GPF) protection and specific tests to ensure oxidation performance, piston cleanliness and sooted valvetrain wear performance.

RENAULT TRUCKS

Obsolete specification for older models. It defines an engine oil meeting the quality level of ACEA E3-96-issue 4 and Volvo VDS-2.

Renault RLD/RLD-2

Renault RD/RD-2

It defines an engine oil meeting the ACEA E7 and Volvo VDS-3 specifications Renault RXD

It defines an extended drain engine oil meeting the ACEA E4. ACEA E7 and Volvo VDS-3 specifications. Renault RLD3

It defines a lower SAPS engine oil meeting the ACEA E9 and Volvo VDS-4 specifications.

Renault RGD

It defines a specific lubricant for gas engines meeting ACEA E6 and Volvo VDS-3 specifications with sulphated ash <1% and TBN 6-8. Renault RI D-41

t defines a lower SAPS engine oil meeting the latest ACEA E9, API CK-4, and Volvo VDS-4.5, specifications

GM/OPEL GROUP ENGINE OIL SPECIFICATIONS

GM Dexos approved oils are recommended to be used in all GM vehicles except those built with Duramax diesel engines that require an API CJ-4 quality

GM Dexos 1

Designed with gasoline engines in mind GM Dexos I replaces the GM-LL-A-025, GM6094M and GM4718M specifications. This specification is usually recommended for GM vehicles built for the North American and Asian markets. Compared to ILSAC GF-5 it has stricter requirements regarding piston deposit formation, aeration, oxidation stability, wear, low-temperature pumpability and volatility.

The GM Dexos 2 specification is meant to be the replacement for both GM-LL-A-025 (gasoline) and GM-LL-B-025 (diesel) specifications for the European market. Oils meeting GM Dexos 2 are required for vehicles manufactured from MY2011 onward but they are also backward compatible with older models. This specification is built on the ACEA C3 standard but also contains elements from the ILSAC GF-4 deposit formation test and low-temperature sludge build-up test.

OPEL Motor Oil Specifications

GM-LL-A-025

Special GM approval for long-life engine oil for gasoline engines. Viscosity is SAE 0W-30. Product meets ACEA A3/B3. Drain interval can be as long as 30 000 kms. Recommended for vehicles built before My2011.

Special GM approval for long-life engine oil for diesel engines. Viscosity is SAE 5W-40. Product meets ACEA A3/B3/B4. Drain interval can be as long as 50 000 kms. Recommended for vehicles built before MY2011.

JASO ENGINE OIL SPECIFICATIONS

2T specifications

Japeneese motorcycle manufacturers found the limits demanded by the APLTC specifications too loose. Oils meeting the APLTC standard still produced excessive smoke and could not prevent exhaust blocking. Therefore the Japanese Engine Oil Standards Implementation Panel (JASO) introduced the following specifications: JASO FA

Original spec established regulating lubricity, detergency, initial torque, exhaust smoke and exhaust system blocking.

JASO FB

Increased lubricity, detergency, exhaust smoke and exhaust system blocking requirements over FA. JASO FC

Lubricity and initial torque requirements same as FB, however far higher detergency, exhaust smoke and exhaust system blocking requirements over FB. JASO FD

Same as FC with far higher detergency requirement.

4T specifications

Modern passenger car engine oils contain more and more friction modifiers. While this is the good thing for those segments (reduces wear and fuel consumption) it's bad for the motorcycles. At least for those motorcycles which use engine oil to lubricate their transmission and wet clutch. JASO introduced the MA and MB specification to distinguish between friction modified and non friction modified engine oils. Most four-stroke motorcycles with wet clutches need a JASO MA oil. JASO MA-2

Japanese standard for special oil which can be used in 4-stroke motorcycle engine with one oil system for engine, gearbox and wet clutch system. Fluid is non-friction modified.

JASO MB

MB grade oils are classified as the lowest friction oils among motorcycle four-cycle oils. Not to be used where a JASO MA grade oil is required



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