

ADVANCED FLUID TECHNOLOGY



PRODUCT CATALOG 2025

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HEXOL SYNLINE ULTRADIESEL DPF 5W30



Hexol SYNLINE UltraDiesel DPF 5W30 is an extra high performance, low SAPS, fuel saving, synthetic engine oil, ensuring long drain intervals. Recommended for use in the most advanced diesel or gasoline naturally aspirated or turbocharged engines, fitted with or without diesel particulate filters (DPF) or three-way catalysts.

- VISCOSITY: SAE 5W30
- QUALITY AND SPECIFICATIONS:

ACEA C3, ACEA A3/B4, API CF/SN, CF/SM; BMW LL-04, VW 504.00, 507.00, PSA B71 2312, Renault RN0720, Ford WSS-M2C946A, Porsche C30, Fiat 9.55535-S2, MB 229.51, Honda HTO-06, ILSAC GF-5/4, GM Dexos2, GM 6094M.





HEXOL SYNLINE ULTRADIESEL DPF 5W40



Hexol SYNLINE UltraDiesel DPF 5W40 is an extra high performance, low SAPS, fuel saving, synthetic engine oil, ensuring long drain intervals. Recommended for use in the most advanced diesel or gasoline naturally aspirated or turbocharged engines, including "Pumpe-Düse" (PD), fitted with or without diesel particulate filters (DPF) or three-way catalysts.

- VISCOSITY: **SAE 5W40**
- QUALITY AND SPECIFICATIONS:

ACEA C3, ACEA A3/B4, API CF/SN, CF/SM; BMW LL-04, VW 502.00, 505.00, 505.01, Renault RN0720, PSA B71 2312, Fiat 9.55535-S2, MB 229.51, Ford WSS M2C917-A.

HEXOL SYNLINE SUPERDIESEL 5W30 DPF



Hexol SYNLINE SuperDiesel DPF 5W30 is an extra high-performance, low SAPS, fuel saving, synthetic engine oil, ensuring long drain intervals. Recommended to be used in the most advanced diesel or gasoline naturally aspirated or turbocharged engines, fitted with or without diesel particulate filters (DPF) or three-way catalysts.

- VISCOSITY: **SAE 5W30**
- QUALITY AND SPECIFICATIONS:

ACEA C3, API CF/SN, CF/SM; BMW LL-04, VW 502.00, 505.00, MB 229.51, Renault RN 0720, PSA B71 2290, Porsche C30, Fiat 9.55535-S2, Jaso DL-1.





HEXOL SYNLINE SPRINTPLUS 5W30



Hexol SYNLINE SprintPlus 5W30 is an extra high-performance, fuel saving, synthetic engine oil. It can be used in the latest generation of naturally aspirated or turbocharged, gasoline or diesel engines, ensuring long drain intervals.

- VISCOSITY: **SAE 5W30**
- OUALITY AND SPECIFICATIONS:

API SN/CF, ACEA A3/B4; BMW LL-04, VW 502.00, 505.00, Porsche C30, MB 229.5, Fiat 9.55535-N2, Renault 0710, PSA B71 2296, Jaso DL-1.





HEXOL SYNLINE SPRINTPLUS 5W40



Hexol SYNLINE SprintPlus 5W40 is an extra high-performance, fuel saving, synthetic engine oil, ensuring long drain intervals. Recommended for use in the most advanced gasoline or diesel naturally aspirated or turbocharged engines.

- VISCOSITY: **SAE 5W40**
- OUALITY AND SPECIFICATIONS:

API SN, SM/CF, ACEA A3/B4; BMW LL-04, VW 502.00, 505.00, Porsche A40, MB 229.5, Fiat 9.55535-N2, Renault 0710, PSA B71 2296, Jaso DL-1.

HEXOL SYNLINE SPRINT 10W30 / 10W40

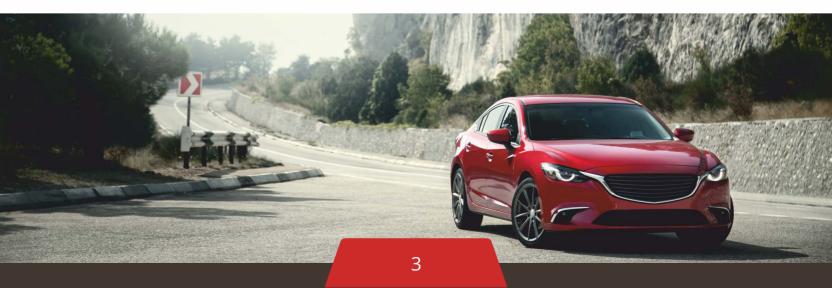


Hexol SYNLINE Sprint 10W30 / 10W40 is a high quality, synthetic blend, multigrade engine oil, recommended for use in all seasons in diesel, gasoline and propane engines. Formulated with highly refined synthetic and mineral base oils and high-performance additives, it meets intensive use requirements, it prevents deposits formation and reduces fuel consumption.

- VISCOSITY: **SAE 10W30 / 10W40**
- QUALITY AND SPECIFICATIONS:

API SL/CF, ACEA A3/B4; VW 500.00, 501.01, 505.00, MB 229.1, Renault 0700, Ford WS-M2, PSA B71 2294, B71 2300, Fiat 9.55535-H2.





HEXOL SYNLINE 4T MOTOSPRINT 10W40

Hexol SYNLINE 4T MotoSprint 10W40 is a high quality, multigrade, synthetic blend engine oil, formulated with synthetic and mineral base oils and a complex additive system (antioxidant, anti-wear, anticorrosive and antifoaming agents). It is recommended for use in all seasons in naturally aspirated or turbocharged gasoline engines, which equip motorcycles, mopeds, scooters, motor boats, passenger cars and light commercial vehicles.

■ VISCOSITY: **SAE 10W40**

OUALITY AND SPECIFICATIONS:

API SL, ACEA A3/B4; Jaso MA2, VW 500.00, 501.01, Fiat 9.55535-H2.







HEXOL SPRINT 15W40



Hexol Sprint 15W40 is a high quality, multigrade engine oil, recommended for use in all seasons in naturally aspirated or turbocharged diesel, gasoline and propane engines. Formulated with highly refined base oils and high-performance additives.

■ VISCOSITY: **SAE 15W40**

■ OUALITY AND SPECIFICATIONS:

API SL/CF, ACEA A3/B3; VW 500.00, 501.01, 505.00, MIL-L-46152B/C, MIL-L-2104C/D, MB 229.1, Ford ESE-M2C-101C, PSA B71 2295, GM 6136M, Fiat 9.55535-G2.

HEXOL SPRINT 2T



Hexol Sprint 2T is a high quality oil, recommended for use in the latest generations of twostroke engines. Formulated with highly refined base oils with a low ash content and dispersants, depressants, anti-wear, anticorrosion and antioxidant additives. It is recommended for use all year round in two-stroke mixed lubrication engines or in fuel injection engines with air-cooling systems.

■ QUALITY AND SPECIFICATIONS:

API TC, Jaso FD(LO), ISO-I-EGD





HEXOL SYNLINE MOTO&GARDEN 10W30



Hexol SYNLINE Moto&Garden 10W30 is a high quality, synthetic blend, multigrade engine oil, formulated from synthetic and mineral base oils and a complex additive system. It is ideal for gardening equipment.

■ VISCOSITY: **SAE 10W30**

■ OUALITY AND SPECIFICATIONS:

API SL, meets the specifications of gardening equipment manufacturer Stihl, Husqvarna, MTD, Briggs & Stratton, Honda, Tecumseh, and others.

HEXOL 2T MOTO&GARDEN

0.6L

Hexol 2T Moto&Garden is a high quality oil, recommended for use in the latest generations of two-stroke engines, formulated with highly refined base oils with a low ash content and dispersants, depressants, anti-wear, anticorrosion and antioxidant additives. It is recommended for use all year round in two-stroke mixed lubrication engines or in fuel injection engines which equip motorcycles, mopeds, scooters, passenger cars, motor boats, ATVs, snowmobiles, gardening equipment, where the manufacturers recommend this type of oil.



API TC, Jaso FD (LO), ISO-L-EGD, meets the requirements of the most important gardening equipment producers: Stihl, Husqvarna, MTD, Briggs & Stratton, Honda, Tecumseh and others.



HEXOL STANDARD GARDEN 10W30





Hexol Standard Garden 10W30 is a multigrade engine oil, formulated with highly refined mineral base oils and a complex additive system (detergents, dispersants, antioxidant, antiwear, anticorrosive agents and viscosity modifier). It is ideal for naturally aspirated and turbocharged engines which equip small tractors and gardening equipment, where the manufacturer recommends this type of oil.

- VISCOSITY: **SAE 10W30**
- QUALITY AND SPECIFICATIONS:

API SF, meets the specifications of garden equipment manufactures Stihl, Husqvarna, MTD, Briggs & Stratton, Honda, Tecumseh and others.

HEXOL 2T STANDARD MIX / HEXOL 2T ECO MIX



Hexol 2T Standard Mix / Hexol 2T Eco Mix are specially formulated oils recommended for use in two-strokes engines. They are formulated with highly refined base oils and a complex additive system (antioxidant, anticorrosive, anti-wear additives, dispersants and depressants), having a low ash content. Used in the recommended proportion they lead to emissions and engine wear reduction.

QUALITY AND SPECIFICATIONS:

STANDARD - RED, ECO - GREEN, API TA, MIX OIL.











HEXOL SYNLINE SUPERDIESEL 10W40



Hexol SYNLINE SuperDiesel 10W40 is a high quality, synthetic blend, multigrade engine oil, recommended for use in all seasons in diesel, gasoline and propane engines meeting EURO III, IV, V - not fitted with DPF. Formulated with highly refined synthetic and mineral base oils and high-performance additives it meets heavy-duty diesel engines lubrication requirements.

- VISCOSITY: **SAE 10W40**
- QUALITY AND SPECIFICATIONS:

API CI-4/SL, ACEA A3/B4, ACEA E7; VW 500.00, 501.01, 505.00, VOLVO VDS-3, MAN 3275-1, MB 228.5, MB 229.1, MTU 2.0, PSA B71 2295, RENAULT 0710, CAT ECF-1/2, Cummins CES 20077 / 20078, MACK EO- N, Detroit Diesel DDC 93K215, Global DHD-1, DEUTZ DQC III, FIAT 9.55535-H2.









HEXOL SUPERDIESEL 15W40



Hexol SuperDiesel 15W40 is a high quality, multigrade engine oil, recommended for use in all seasons in diesel, gasoline and propane engines meeting EURO III, IV, V - not fitted with DPF. Formulated with high quality base oils and high-performance additives it meets heavyduty diesel engines lubrication requirements.

- VISCOSITY: **SAE 15W40**
- QUALITY AND SPECIFICATIONS:

API CI-4/SL, ACEA A3/B4, ACEA E7; VW 500.00, 501.01, 505.00, VOLVO VDS-3, MAN 3275-1, MB 228.5, MB 229.1, MTU 2.0, PSA B71 2295, RENAULT 0710, CAT ECF-1/2, Cummins CES 20077 / 20078, MACK EO- N, Detroit Diesel DDC 93K215, Global DHD-1, DEUTZ DQC III, FIAT 9.55535-H2.

HEXOL TURBODIESEL 10W40 / 15W40



Hexol TurboDiesel 10W40 / 15W40 is a high quality, multigrade engine oil, recommended for use in all seasons in diesel, gasoline and propane engines. Formulated with highly refined synthetic and mineral base oils and high-performance additives, it provides excellent engine protection under normal conditions of use.

- VISCOSITY: **SAE 10W40 / 15W40**
- QUALITY AND SPECIFICATIONS:

API CF/SJ, ACEA A2/B2, ACEA E2; VW 500.00, 501.01, 505.00, MB 229.1, Volvo VDS, MAN271, Renault RN0700, Ford WS-M2, Fiat 9.55535-D2, PSA B71 2295.



HEXOL STANDARD 15W40



Hexol Standard 15W40 is high quality, multigrade engine oil, recommended for use in all seasons in naturally aspirated or turbocharged diesel, gasoline and propane engines, for passenger cars, commercial vehicles and other equipment. Unless otherwise instructed in the operating manual, the recommended drain interval is 10.000 km.

- VISCOSITY: **SAE 15W40**
- **QUALITY AND SPECIFICATIONS:**

API SF/CF, ACEA A2/B2; VW 500.00, 501.01, 505.00, MIL-L-2104-C, MB 229.1, CMG.G1/D1, Ford M2C-101-C, Fiat 9.55535-G2.







HEXOL STANDARD 20W50



Hexol Standard 20W50 is a multigrade engine oil, produced from highly refined mineral base oils with additives providing adequate performance levels (detergent, dispersant, antioxidant, anti-wear, anticorrosive and antifoam agents, pour point depressant, and viscosity modifier). It is ideal for naturally aspirated and turbocharged engines of gasoline, diesel or LPG powered vehicles operating under severe conditions, where the manufacturer recommends this type of oil.

- VISCOSITY: **SAE 20W50**
- QUALITY AND SPECIFICATIONS:

API SF/CF, ACEA A2/B2; MIL-L-46152 C

HEXOL STANDARD W30, W40, W50

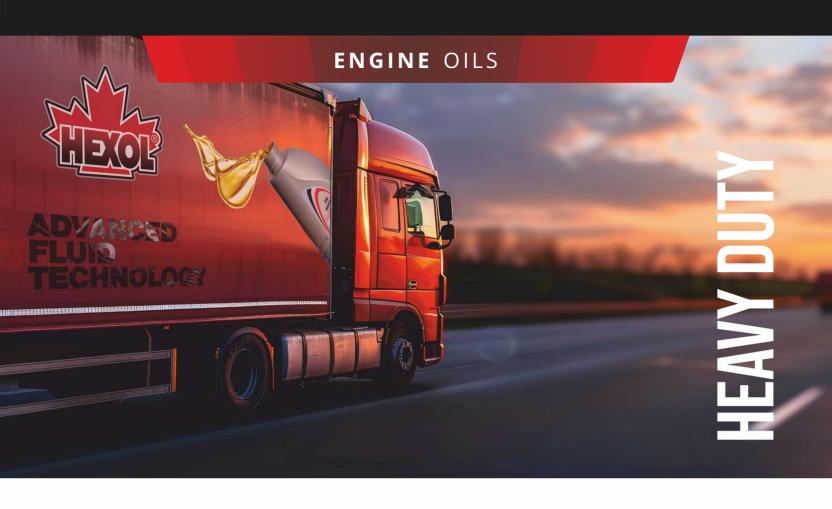


Hexol Standard are monograde engine oils, produced from highly refined mineral base oils with additives providing adequate performance levels (detergent, dispersant, antioxidant, anti-wear, anticorrosive, antifoam agents, pour point depressant). Are ideal for naturally aspirated and turbocharged engines of gasoline, diesel or LPG powered vehicles operating under severe conditions, where the manufacturer recomands this type of oil. Reccomanded to be used when environment temperature is above 0°C.

- VISCOSITY: **SAE 30, 40, 50**
- QUALITY AND SPECIFICATIONS:

API SF/CF, ACEA A2/B2; MIL-L-46152 C





HEXOL SYNLINE ULTRATRUCK MAXX 5W30 / 10W30 / 10W40 / 15W40



Hexol SYNLINE UltraTruck Maxx is a synthetic engine oil that ensures high performance and fuel economy in "heavy duty" (HD) operating conditions. Produced from synthetic base oils and a complex additive system with low levels of sulfur ash, phosphorus and sulphur (low SAPS), it provides excellent flow and lubrication characteristics. This oil meets the requirements of the most important associations of motor vehicle and machinery manufacturers.

- VISCOSITY: 5W30 / 10W30 / 10W40 / 15W40
- QUALITY AND SPECIFICATIONS:

ACEA E7, ACEA E8, ACEA E11, API CK-4; MB 228.51, 228.31, MAN 3477, 3575, 3677, 3271-1, DETROIT DIESEL DFS 93K222, DFS 93K218, DDC 93K218, MTU Type 3.1 / 2.1, Volvo VDS 4.5 / 4 / 3, JASO DH-2, Renault RLD-4 / RLD-3, CAT ECF-1a / ECF-2 / ECF-3, MACK EOS 4.5 / EO-OPP, Deutz DQC IV-10LA, IVECO TLS E9, DHD - 1, Cummins CES20081 / CES20086, Scania LA-2 / LA / LDF, DAF Extended Drain, CNG and Ford WSS-M2C171-F1.





HEXOL SYNLINE ULTRATRUCK 5W30 / 10W30 / 10W40 / 15W40



Hexol SYNLINE UltraTruck is an extra high performance, low ash, synthetic engine oil, developed for commercial diesel vehicles fitted with the latest exhaust gas treatment equipment. It meets the requirements of a wide range of performance levels of the most outstanding engine manufacturers such as: Mercedes-Benz, MAN, Volvo, Renault, Deutz, Caterpillar, Cummins, Mack, Detroit Diesel and others, together with the most stringent US and European specifications for diesel engine oils. This product is suitable for heavy-duty road and off-road vehicles.



- VISCOSITY: **SAE 5W30 / 10W30 / 10W40 / 15W40**
- QUALITY AND SPECIFICATIONS:

ACEA E9, ACEA E7, ACEA E6, API CK-4/SN and API CJ-4/SM; MB 228.51, 228.31, MAN 3477, 3575, 3677, 3271-1, DETROIT DIESEL DFS 93K222, DFS 93K218, DDC 93K218, MTU Type 3.1 / 2.1, Volvo VDS 4.5 / 4 / 3, JASO DH-2, Renault RLD-4 / RLD-3, CAT ECF-1a / ECF-2 / ECF-3, MACK EOS 4.5 / EO-OPP, Deutz DQC IV-10LA, IVECO TLS E9, DHD - 1, Cummins CES20081 / CES20086, Scania LA-2 / LA / LDF, DAF Extended Drain, CNG and Ford WSS-M2C171-F1.



HEXOL SYNLINE SUPERTRUCK 10W40



Hexol SYNLINE SuperTruck 10W40 is a high quality, multigrade, synthetic blend oil, specially formulated for heavy-duty diesel applications (trucks, construction, agricultural and lifting equipment), recommended for use in all seasons, in naturally aspirated or turbocharged diesel engines not fitted with DPF.

- VISCOSITY: **SAE 10W40**
- QUALITY AND SPECIFICATIONS:

API CI-4/SL, ACEA E7, ACEA A3/B4; VOLVO VDS-3, MAN 3275-1, 3277, MB 228.5, RENAULT RLD2, MTU 2.0, MACK EO-N, / EO-M plus, CAT ECF-1/2, DAF, Cummins CES 20077 / 20078, Detroit Diesel DDC 93K215, Global DHD-1, DEUTZ DQC III-10, AVIA DDC 93K215, MIL-L-2104E, TEDOM 258-3, JOHN DEERE 6020 / 6120 / 6220 / 6320 / 6420 / 6420S, DQC III-10 and TATRA TDS 30/16.

HEXOL SUPERTRUCK 15W40



Hexol SuperTruck 15W40 is a high quality, multigrade oil, specially formulated for heavy-duty diesel applications (trucks, construction, agricultural and lifting equipment), recommended for use in all seasons in naturally aspirated or turbocharged diesel engines not fitted with DPF. Ily aspirated or turbocharged diesel engines not fitted with DPF.

- VISCOSITY: **SAE 15W40**
- QUALITY AND SPECIFICATIONS:

API CI-4/SL, ACEA E7, ACEA A3/B4; VOLVO VDS-3, MAN 3275-1, 3277, MB 228.5, RENAULT RLD2, MTU 2.0, MACK EO-N, / EO-M plus, CAT ECF-1/2, DAF, Cummins CES 20077 / 20078, Detroit Diesel DDC 93K215, Global DHD-1, DEUTZ DQC III-10, AVIA DDC 93K215, MIL-L-2104E, TEDOM 258-3, JOHN DEERE 6020 / 6120 / 6220 / 6320 / 6420 / 6420S, DQC III-10 and TATRA TDS 30/16.







HEXOL SYNLINE TORSION 75W80



Hexol SYNLINE Torsion 75W80 is an extra high performance, synthetic blend, multigrade automotive gear oil, that possess excellent lubrication qualities thus ensuring excellent wear protection and extended drain intervals. Recommended for use in the most advanced automotive gearboxes and limited slip differentials (LSD).

■ VISCOSITY: **SAE 75W80**

■ QUALITY AND SPECIFICATIONS:

API GL-5, GL-4; PSA B71 2330, Tatra TDS 80/32, MIL-L-2105D, ZF TE-ML 07 A, ZF TE-ML 17 B.





HEXOL SYNLINE TORSION 75W90



Hexol SYNLINE Torsion 75W90 is an extra high performance, synthetic blend, multigrade automotive gear oil, that possess excellent lubrication qualities thus ensuring excellent wear protection and extended drain intervals. Recommended for use in the most advanced automotive manual gearboxes and limited slip differentials (LSD).

■ VISCOSITY: **SAE 75W90**

QUALITY AND SPECIFICATIONS:

API GL-5, GL-4; Tatra TDS 80/32, MIL-L-2105D, ZF TE-ML 07 A, ZF TE-ML 17 B.

TRANSMISSION OILS

HEXOL TORSION 80W90



HEXOL Torsion 80W90 is a high-quality multigrade hypoid gear oil, recommended for use throughout the year on differentials, manual gearboxes. Formulated from base oils with high performance additives with EP (extreme pressure) properties, anti-corrosive, anti-oxidant, anti-wear, anti-foaming, provides maximum protection against protection against mechanical wear.

- VISCOSITY: **SAE 80W90**
- QUALITY AND SPECIFICATIONS:

API GL-5; MIL-L-2105D, MAN 342 Type M-2, MB 235.2, Scania STO 1:0, Renault Tranself NFP (aka Tranself TRX), Ford M2C200-B, M2C94-A, ZF TE-ML 05A, 07A, 12E, 16B, 16C, 17B, 19B, 21A, Tatra TDS 80/32.



HEXOL TORSION 80W90 LS



Hexol Torsion 80W90 is a high-quality multigrade hypoid gear oil, recommended for use throughout the year on differentials, manual gearboxes, as well as for limited slip (LS) gears. Formulated from base oils with high performance additives with EP properties, anticorrosive, anti-oxidant, anti-wear, anti-foaming, provides maximum protection against mechanical wear.

- VISCOSITY: SAE 80W90
- QUALITY AND SPECIFICATIONS:

API GL-5; MIL-L-2105D, MAN 342 Type M-2, MB 235.2, Scania STO 1:0, Renault Tranself NFP (aka Tranself TRX), Ford M2C200-B, M2C94-A, ZF TE-ML 05A, 07A, 12E, 16B, 16C, 17B, 19B, 21A, Tatra TDS 80/32.

HEXOL TORSION T90



Hexol Torsion T90 GL-5 is a monograde gear oil, recommended for the lubrication of spur gears and differentials of cars, trucks or any equipment where API GL-5 performance level is required.

- VISCOSITY: **SAE T90**
- QUALITY AND SPECIFICATIONS:

API GL-5; DIN 51517-3(CLP), MIL-L-2105D, ST-OG 19/2005, JI Case MS, Massey Ferguson M1110, Volvo 7325.





HEXOL STANDARD 80W90



Hexol Standard 80W90 is a high quality, multigrade gear oil recommended for the lubrication of gear boxes, axle housing, universal joints and differentials where API GL-4 or lower performance level is required.

- VISCOSITY: **SAE 80W90**
- QUALITY AND SPECIFICATIONS:

API GL-4; MIL-L-2105C, MB 235.2, MAN 341, Ford M2C200-B, Iveco.

TRANSMISSION OILS

HEXOL STANDARD T90 / T140



Hexol Standard is a monograde gear oil recommended for the lubrication of gearboxes, spur gears, dividers and differentials on cars, trucks or any equipment where API GL-2 performance level is required.

- VISCOSITY: **SAE T90 / T140**
- QUALITY AND SPECIFICATIONS:

API GL-2; DIN 51517-2(CL), ST-OG 19/2005, JI Case MS, Massey Ferguson M1110, Volvo 7325.





HEXOL SYNLINE ATF TORSION



Hexol SYNLINE ATF Torsion is a high quality, synthetic blend, automatic transmission oil, recommended for cars, trucks and other commercial and industrial equipment. Also suitable for hydraulic systems requiring anti-wear type hydraulic oils with superior low temperature fluidity.

QUALITY AND SPECIFICATIONS:

GM Dexron III H; MAN 339 Typ V1-Z1, Allison C- 4, Allison TES 389, MB 236.1, Caterpillar TO-2, Voight H55.6335, ZF TE-ML 04D, 05L, 09, 14A, 16L, 17C, Toyota T-III, Ford Mercon, Suzuki ATF Oil.

HEXOL ATF DEXRON II



Hexol ATF Dexron II is a high-quality transmission oil, recommended for use in semi-automatic and automatic transmission installations, in power assisted steering systems as well as in hydraulic systems. Hexol ATF DEXRON II is specially formulated with mineral base oils and specific additives and it is recommended for use all year round in automatic transmission or any transmissions where this type of oil is required.

■ QUALITY AND SPECIFICATIONS:

GM Dexron – IID; Ford Mercon, Allison C4, MAN 339 Typ V1-Z1, Caterpillar TO2, Voith H55.6335, ZF TE-ML 02F, 03D, 04D, 09, 11A, 14A.





HEXOL ATF UNIVERSAL



Hexol ATF Universal is an automatic transmission oil, recommended for use in automatic transmissions, power assisted steering and any other hydraulic, construction, agricultural or industrial equipment where this type of oil is recommended. Good performance at low temperatures.

QUALITY AND SPECIFICATIONS:

GM Type A Suffix A, Allison C- 3.



HEXOL STOU 10W30 / 10W40 / 15W40



Hexol STOU are integrated oils, formulated from high quality mineral and synthetic base oils, recommended for use in the latest generations of tractors. The special rheological properties and the complex additive package of the oils are specially designed according to the highest requirements of the most modern tractors and agricultural machines. They ensure excellent anti-wear engine protection and cold flow properties.

- VISCOSITY: **SAE 10W30 / 10W40 / 15W40**
- QUALITY AND SPECIFICATIONS:

API CG-4/SF, API GL-4, ACEA E3; Massey Fergusson CMS 1145, 1144, 1139; Ford M2C159B; Allison C4; ZF TE ML 06A, 06B, 06C, 06D, 07B; Caterpillar TO-2; John Deere J27; MB 227.1, MB 228.1, MB 228.3; MAN 271; MIL-L-2104D; New Holland 82009201/2/3; Case New Holland MAT3525, 3526.





HEXOL UTTO 80W/10W30 PREMIUM



Hexol UTTO Premium is a hydraulic-transmission oil with special rheological properties, recommended for use all year round, in tractors and other off-road vehicles in differentials, gearboxes, steering systems, hydraulic systems or any other type of equipment where the manufacturer recommends this type of oil. Recommended for use in wet breaks equipment. Formulated with high quality mineral base oils and a complex system of high-performance additives.

- VISCOSITY: **SAE 80W/10W30**
- QUALITY AND SPECIFICATIONS:

API GL-4; Massey-Ferguson 1145, Ford and International Harvester, John Deere J20D; J.I. Case; Case New Holland MAT 3525, 3526, 3505, 3540; Volvo WB-101; Eaton Vickers; White Farm Equipment, Allis Chalmers, Steiger, Caterpillar CAT TO-2; ZF TE-ML-03F, 05F, 06K, 17E, 21F; Allison C-4; Kubota Super UDT2; Parker (Denison) HF-2.

OFF-ROAD

HEXOL UTTO 80W STANDARD



Hexol UTTO 80W Standard is a hydraulic-transmission oil with special rheological properties, recommended for use all year round in differentials, gearboxes, steering systems, hydraulic systems or any other type of equipment where the manufacturer recommends this type of oil.

- VISCOSITY: **SAE 80W**
- OUALITY AND SPECIFICATIONS:

API GL-4; Massey-Ferguson 1134,1135,1141,1145, Ford M2C134D, John Deere JDM, J20C, Caterpillar CAT TO-2.





HEXOL HYDROMOTOR SAE 10W



HEXOL HYDROMOTOR SAE 10W is a high-quality monograde oil, recommended for use in engines and hydraulic systems, which equip construction, mining, material handling machinery or other types of machinery where the manufacturer recommends the use of such a lubricant. Formulated from mineral base oils with a complex additive package, it ensures excellent performance in operation for engine and hydraulic system.

- VISCOSITY: **SAE 10W**
- QUALITY AND SPECIFICATIONS:

API CF, meets the requirements of the DIN 51524 part2 (HLP) specifications.

HEXOL TORSION HYDROGEAR TO-4 SAE 10W / 30W / 50W

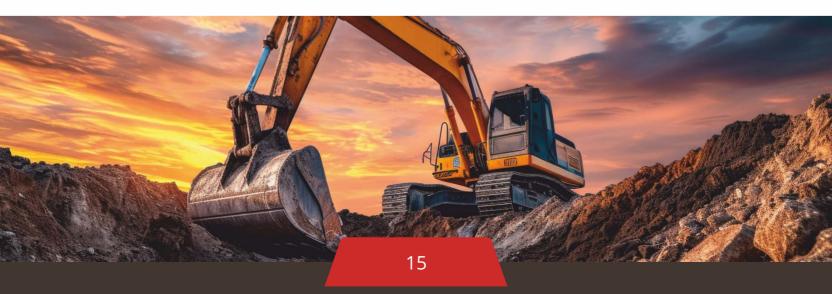


HEXOL TORSION HYDROGEAR TO-4 is a semi-synthetic, high quality oil, specially formulated to meet the requirements of: CATTERPILLAR, ALLISON and KOMATSU, recommended for use in transmissions and hydraulic systems, which equip construction, mining and material handling machinery. Formulated from highly refined, hydrotreated base oils with a complex additive package, it provides excellent performance in operation for transmission, hydraulics and wet brakes.

- VISCOSITY: **SAE 10W / 30W / 50W**
- QUALITY AND SPECIFICATIONS:

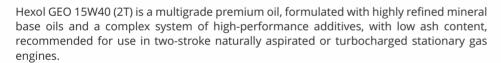
API GL-4, meets the requirements of CAT TO-4, Allison-C4, Allison TES-439, Komatsu Driveline, ZF TE-ML 03C, 07F, API CF and DIN 51524 part2 (HLP).







HEXOL GEO 15W40 (2T)



- VISCOSITY: **SAE 15W40**
- QUALITY AND SPECIFICATIONS:

API CC; MIL-L-2104-A, Ingersoll-Rand Category II, Ajax, Clark, Cooper-Bessemer, Fairbanks-Morse.





HEXOL GEO SAE 40 / GEO 15W40 (4T)

HEXOL GEO are high quality oils, formulated with highly refined mineral oils and high-performance additives, with low ash content, recommended for use in four-stroke naturally aspirated or turbocharged stationary gas engines.

- VISCOSITY: SAE 40 / SAE 15W40
- QUALITY AND SPECIFICATIONS:

API CF; MIL-L-2104-C, Cummins CES 20074, MAN, Jenbacker Type 3&6, Deutz 600, Caterpillar G3500/G3600; 3400/3500, Waukesha VHP, Guascor FGLD, Jenbacher Type 3, Cummins, Ariel, Tedom, Wartsila.

HEXOL GEO TB-XP 32 / 46



HEXOL GEO TB-XP are high quality, ashless, zinc free, turbine oils, specially formulated for use in lubricating any type of fixed and mobile turbines. Hexol GEO TB-XP 32-46 are formulated with highly refined mineral and synthetic base oils and a well-balanced additive package, OEM approved by the mentioned turbine manufacturers.

- VISCOSITY: **32 / 46**
- QUALITY AND SPECIFICATIONS:

DIN 51515-1(L-TD); DIN 51515-2(L-TG), GEK 28143 A, GEK 32568F/G, Siemens TLV 9013 04 & TLV 9013 05, Alstom Turbo Systems HTGD 90-117 V0001 S, Cincinnati P-38, Solar ES 9-224, ISO 8068, JIS K 2213, BS 489, US Steel 120, ASTM D4304, JIS K 2213, Westinghouse Electric Corp. Turbine Oil Spec.; DIN 51506 (VBL, VCL, VDL), DIN 51524-1 (HL), DIN 51517-2 (CL).



HEXOL TBA 32 / 46 / 68



Hexol TBA are high quality, zinc free, turbine oils, specially formulated for use in lubricating turbines. Formulated with highly refined mineral base oils with a high degree of stability and a well-balanced additive system.

- VISCOSITY: **32 / 46 / 68**
- **QUALITY AND SPECIFICATIONS:**

DIN 51515-1(L-TD); DIN 51515-2(L-TG); ISO 8068 Type AR, ISO 6743-5, ISO-L-TSA, ISO-L-TGA, GEK 32568 A/C; DIN 51517-2(CL); Cincinati P38, P55, P54, P62; US Steel 120; DIN 51524-2 (HLP).

HEXOL STANDARD HV 32 / 46 / 68



Hexol STANDARD HV are high quality, ashless, hydraulic oils, with high viscosity index, specially formulated for use in industrial, construction, mining, pick-up hydraulic equipment as well as in any other fixed and mobile hydraulic systems, working under extreme pressure conditions (EP). Hexol HV oils are formulated with highly refined mineral base oils and a well-balanced additive system (anticorrosion, anti-wear, antioxidant, antifoaming additives) and viscosity index improver.

- VISCOSITY: **32 / 46 / 68**
- QUALITY AND SPECIFICATIONS:

ISO 6743-4, ISO-L-HV, DIN 51524-3 (HVLP), AFNOR NF E 48-603(HM), Sperry Vickers I-286-S, US Steel 126 and 127.



HEXOL PREMIUM HV 32 / 46 / 68



HEXOL PREMIUM HV are high quality oils with high viscosity index, specially designed for use at very low temperatures in industry, construction, mining, hydraulic lifting systems, as well as in any other fixed and mobile hydraulic systems that work under extreme pressure (EP) conditions. They are produced from high-refined base oils, with a package of special anticorrosion, anti-wear, anti-oxidation, anti-foaming additives and viscosity index enhancers.

- VISCOSITY: **32 / 46 / 68**
- OUALITY AND SPECIFICATIONS:

ISO 6743-4, ISO-L-HV, DIN 51524-3 (HVLP), AFNOR NF E 48-603(HM), Sperry Vickers I-286-S, US Steel 126 and 127.



HEXOL AW-HLPD 32 / 46 /68



Hexol AW-HLPD are high quality, hydraulic oils, specially formulated for use in industrial, construction, mining, pick-up hydraulic equipment as well as in any other fixed and mobile hydraulic systems, working under extreme pressure conditions (EP). Specially recommended for applications where the contamination of oil with water is likely to occur, without affecting oil properties. Hexol AW HLPD are formulated with highly refined mineral base oils and a well-balanced additive system (anticorrosion, anti-wear, antioxidant, antifoaming additives and detergent), possessing excellent anti-wear properties.

- VISCOSITY: **32 / 46 / 68**
- QUALITY AND SPECIFICATIONS:

ISO 6743-4, ISO-L-HM, DIN 51524-2 (HLPD), AFNOR NF E 48-603(HM), Sperry Vickers I-286-S, US Steel 126 and 127.

HEXOL AW 15 / 22 / 32 / 46 / 68 / 100



Hexol AW are high quality hydraulic oils, specially formulated for use in industrial, construction, mining, pick-up hydraulic equipment as well as in any other fixed and mobile hydraulic systems working under high pressure conditions.

- VISCOSITY: 15 / 22 / 32 / 46 / 68 / 100
- QUALITY AND SPECIFICATIONS:

ISO 6743-4, ISO-L-HM, DIN 51524-2 (HLP), AFNOR NF E 48-603(HM), Sperry Vickers I-286-S, US Steel 126 and 127.



HEXOL AW-EP ZF (ZINC FREE) 22 / 32 / 46 / 68 / 100



Hexol AW-EP ZF (zinc free) are high quality, zinc free, hydraulic oils specially formulated for use in industrial, construction, mining, pick-up hydraulic equipment as well as in any other fixed and mobile hydraulic systems, working under extreme pressure conditions (EP). Formulated with highly refined mineral base oils and a well-balanced additive system (anticorrosion, anti-wear, antioxidant, antifoaming additives), possessing excellent anti-wear properties.



ISO 6743-4, ISO-L-HM, DIN 51524-2 (HLP), DIN 51515 part 2, DIN 51506 (VBL, VCL, VDL), AFNOR NF E 48-603 (HM), Sperry Vickers I-286-S, US Steel 120, MIL -L-17672 D, BB HTGD 90117, GE GEK 32568 A/C.





HEXOL HA 15 / 22 / 32 / 46 / 68 / 100



Hexol HA are high quality hydraulic oils specially formulated for use in industrial, construction, mining and pick-up hydraulic equipment as well as in any other fixed and mobile hydraulic systems.

- VISCOSITY: 15 / 22 / 32 / 46 / 68 / 100
- QUALITY AND SPECIFICATIONS:

ISO 6743-4, ISO-L-HL, DIN 51524-1 (HL), DIN 51501 L-AN, Denison TP02100, US Steel 126&127, AFNOR NF E 48-603, Vickers I-286-S.

HEXOL KA 22 / 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460



Hexol KA are high quality ashless, zinc free, compressor oils specially formulated for use in lubricating any type of fixed and mobile compressor, where the manufacturer recommends an oil with these characteristics. Hexol KA oils are formulated with highly refined mineral base oils and a well-balanced additive system (anticorrosion, anti-wear, antioxidant, antifoaming additives and detergents).

- VISCOSITY: 22 / 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460
- QUALITY AND SPECIFICATIONS:

ISO 6743-3A, ISO-L-DAA, DAB, DAH, DIN 51506 VBL, VCL, VDL, DIN 51524-2(HLP).





HEXOL LA 22 / 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460



Hexol LA are oils recommended for lubricating sliding bearings, formulated with highly refined mineral oils characterised by high flammability temperatures, low volatility and low flow temperatures, thus providing safe operation and high rheological properties.

- VISCOSITY: 22 / 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460
- QUALITY AND SPECIFICATIONS:

DIN 51501 L-AN, ISO 6743-2 ISO-L-FC, DIN 51524-1 (HL), DIN 51517-2 (CL).

HEXOL GA 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460



Hexol GA are slideway oils, specially formulated with highly refined mineral oils and a high-performance additive package (anti-wear, antioxidant, anticorrosion, rust inhibitor) ensuring high-pressure resistance and improved adhesion. Provides excellent lubrication at low temperatures as well as high temperatures and efficient machine operation.

- VISCOSITY: 32 / 46 / 68 / 100 / 150 / 220 / 320 / 460
- **QUALITY AND SPECIFICATIONS:**

ISO 6743-13, ISO-L-GA, DIN 51517-3 (CLP).





HEXOL STANDARD CHAIN OIL VG 68



Hexol Standard Chain Oil is recommended for lubricating open gears, chains, chainsaws, axels, bearings etc. It has in its composition anti-wear additives, anticorrosion additives and tackifier agents that improve adhesion, decreasing fuel and lubricant consumption.

- VISCOSITY: **68**
- **QUALITY AND SPECIFICATIONS:**

DIN 51501 L-AN, ISO 6743-1, ISO-L-AN, DIN 51517-1 (C), recommended for lubricating open gears, chains, chainsaws, axels, bearings for use in all seasons.

HEXOL PREMIUM CHAIN OIL VG 100



Hexol Premium Chain Oil is recommended for lubricating open gears, chains, chainsaws, axels, bearings etc. It has in its composition anti-wear additives, anticorrosion additives and tackifier agents that improve adhesion, decreasing fuel and lubricant consumption.

- VISCOSITY: 100
- QUALITY AND SPECIFICATIONS:

DIN 51501 L-AN, ISO 6743-1, ISO-L-AN, DIN 51517-1 (C), recommended for lubricating open gears, chains, chainsaws, axels, bearings for use in all seasons.





HEXOL TIN 68 / 100 / 150 / 220 / 320 / 460



Hexol TIN are industrial transmission oils, specially additivated in order to ensure safe gear operation, good resistance to high pressures, wear and oxidation.

- VISCOSITY: **68 / 100 / 150 / 220 / 320 / 460**
- QUALITY AND SPECIFICATIONS:

ISO 6743-6, ISO-L-CKC, ISO-L-CKD, DIN 51517-3 (CLP), API GL-4.

HEXOL HT 32 / 46 / 68 / 100



Hexol HT are excellent quality heat transfer oils, formulated with high quality mineral oils (characterised by high flammability temperatures and low content of volatile substances) and a specific additive package ensuring safe exploitation. Having excellent anticorrosion properties, Hexol HT oils are used as technological fluids in heat transfer operations.

■ VISCOSITY: **32 / 46 / 68 / 100**

■ QUALITY AND SPECIFICATIONS:

ISO 6743-12, ISO-L-QC, DIN 51522 Q.





HEXOL TT 32 / 46 / 68 / 100



Hexol TT are excellent quality quench oils, designed for high-speed quenching operations. They are formulated with high quality mineral oils (characterised by high flammability temperatures, low content of volatile substances) and a specific additive package. Having excellent antioxidation and anticorrosion properties, Hexol TT oils are used as technological fluids in heat treatment operations, with special recommendations for cast iron and nonferrous parts.

■ VISCOSITY: **32 / 46 / 68 / 100**

■ QUALITY AND SPECIFICATIONS:

ISO 6743-14, ISO-L-UHA, ISO-L-UHB, DIN 51522 Q.

HEXOL BK 22 / 32 / 46 / 68 / 100



Hexol BK are highly refined mineral oils containing release improver and anticorrosion additives. They prevent concrete from adhering to the mould, thus helping with demoulding and cleaning the mould. The use of Hexol BK oils results in casting products with high quality finished surfaces. The products provide strong corrosion protection for metal moulds between two operations and extend their period of use.

■ VISCOSITY: **22/32/46/68/100** ■ QUALITY AND SPECIFICATIONS:

ISO 6743-1, ISO-L-AN, DIN 51501 AN.





HEXOL SOLUBLE GP XL



Hexol Soluble GP XL (extra-life) is a high quality, water soluble, metalworking oil, recommended for use in cooling down machine tools components and semi-finished products during chipping hard alloys. It can also be used in other situations where cooling emulsions are required by diluting the oil with water.

HEXOL SOLUBLE MR22 D



Hexol Soluble MR22 D is a water soluble, mold release oil, formulated with mineral oils and special additives, efficient for all types of formworks. It does not contain solvents. The tools, trucks and dump trucks, used for concrete pouring, can also be successfully protected against adherent mortar or concrete deposits. It can be applied even at low temperatures, having a wide spectrum in the construction field. It does not stain the concrete, ensures an easy release and does not stop the casting work continuity. Subsequent treatment of the concrete surface is possible without need for cleaning.





HEXOL SOLUBLE ASPHALT AG



Hexol Soluble Asphalt AG is ideal for removing asphalt and bitumen from tools and equipment surface used in the field, forming a protecting film on their surface. This demolding oil is formulated with water miscible mineral base oils and it does not contain solvents. It is recommended for use in equipment for mixing and leveling asphalt and bitumen, as well as for all the usual types of formworks (non-absorbent, low-absorbency, all-plastic or clad with plastic) used in construction works.

HEXOL MF 15 / 22



Hexol MF are oils recommended for lubricating and protecting the fine mechanics elements of the machines (mechanisms, motors, hydraulic systems).

■ VISCOSITY: **15 / 22**

QUALITY AND SPECIFICATIONS:

ISO 6743-2



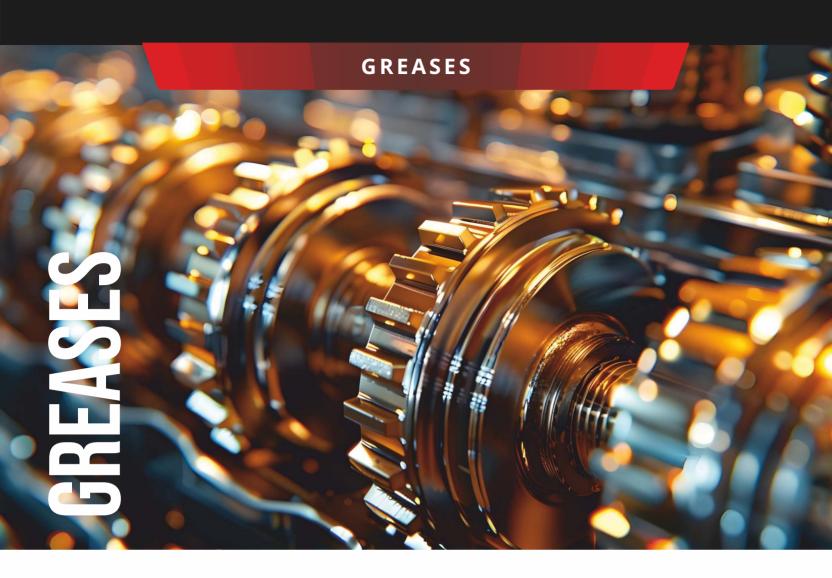


HEXOL MC 15 GUN OIL



Hexol MC 15 gun oil is an oil intended for lubricating, maintenance and cleaning of firearms of any type and caliber. It provides protection against corrosion and it cleans the metal parts of the firearms.

■ VISCOSITY: **15**



HEXOL LI EP 2 COMPLEX BLUE LONGLIFE



Hexol Li EP2 Blue LongLife is a high-performance, lithium complex-based, general purpose lubricating grease, suitable for use under extreme pressure conditions (EP). Recommended for lubricating bearings operating at high loads and high temperature and speed, in automotive and industrial applications. Works ideally at temperatures situated between - 30° C and + 160° C, with good results up to 180° C.

- DROPPING POINT: 270°C
- QUALITY AND SPECIFICATIONS:

ISO 6473-9:L-XCEEB 2; NLGI-2; DIN 51502: KP2P-30.





HEXOL LI-EP2 SUPREME



Hexol Li EP 2 Supreme is a high-performance, lithium-based, multipurpose lubricating grease, suitable for use under extreme pressure conditions (EP). Recommended for lubricating rolling and sliding bearings, working at high loads and high temperature in the automotive, metallurgical and construction industry. The operating temperature range is situated between -30°C and +120°C.

- DROPPING POINT: 195°C
- QUALITY AND SPECIFICATIONS:

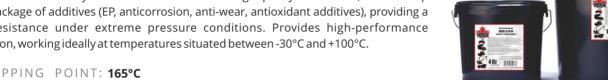
ISO 6743-9:L-XCCEB 2, NLGI-2, DIN 51502:KP2K-30.

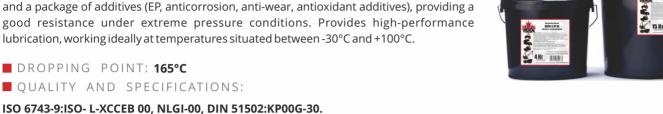
GREASES

HEXOL LI-EP 00 CENTRAL



Hexol Li EP 00 Central is a semi-liquid, high quality, lithium-based lubricating grease, intended to be used in a wide range of industrial and automotive applications especially in centralised lubrication systems. It is formulated with high quality mineral oils, lithium soap and a package of additives (EP, anticorrosion, anti-wear, antioxidant additives), providing a good resistance under extreme pressure conditions. Provides high-performance lubrication, working ideally at temperatures situated between -30°C and +100°C.







HEXOL LI2 STANDARD



Hexol Li2 Standard is a lithium-based, multipurpose lubricating grease, which has good mechanical stability and water resistance, ensuring good lubrication and corrosion protection. Formulated with highly refined mineral base oils, lithium-soap and a complex package of additives (anticorrosion, anti-wear and antioxidant additives), it provides protection against wear and friction. This product functions ideally at temperatures situated between -25°C and +110°C.

- DROPPING POINT: 195°C
- OUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XBCEA 2, NLGI-2, DIN 51502:K2K-25.

HEXOL CAG2 OPTIMUM



Hexol CaG2 Optimum is a calcium-based lubricating grease with graphite in the composition. Specially formulated for optimal protection and wear reduction, at high temperatures, providing also an excellent water resistance. Indicated for any application at temperatures situated between -10°C and +60°C.

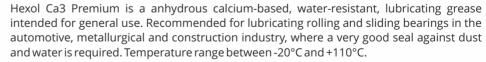
- DROPPING POINT: 95°C
- **QUALITY AND SPECIFICATIONS:**

ISO 6743-9:L-XBBHA 2; NLGI-2; DIN 51502: KF2E-10.



HEXOL CA3 PREMIUM





- DROPPING POINT: 150°C
- QUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XBCEA 3; NLGI-3; DIN 51502 K3H-20.



GREASES

HEXOL CA2 STANDARD



Hexol Ca2 Standard is a calcium-based, general purpose, water-resistant lubricating grease. Recommended for lubricating points where a very good seal against dust and water is required, the loads are moderate and the operating temperature does not exceed +60°C.

- DROPPING POINT: 90°C
- QUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XBAHA 2, NLGI-2, DIN 51502:K2C-20.



HEXOL CA3 STANDARD



Hexol Ca3 Standard is a calcium-based, general purpose, water-resistant lubricating grease. Recommended for lubricating points where a very good seal against dust and water is required, loads are moderate and the operating temperature does not exceed +60°C.

- DROPPING POINT: 95°C
- QUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XBAHA 3, NLGI 3, DIN 51502:K3C-20.

HEXOL LI CA2 PREMIUM



Hexol Li Ca2 Premium is a lithium / calcium-based lubricating grease, offering the benefits of both saponification agents, ensuring excellent water and friction resistance and a good protection against corrosion and wear in various applications, in working conditions situated at temperatures between -30°C and +110°C.

- DROPPING POINT: 170°C
- QUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XCCEA 2, NLGI-2, DIN 51502:K2H-30.



HEXOL LI CA2 STANDARD





Hexol Li Ca2 Standard is a lithium / calcium-based lubricating grease, offering the benefits of both saponification agents, ensuring excellent water resistance and a good protection against corrosion and wear in various applications, in working conditions situated at temperatures between -20°C and +110°C.

- DROPPING POINT: 150°C
- QUALITY AND SPECIFICATIONS:

ISO 6743-9:L-XBCEA 2; NLGI-2; DIN 51502 K2H-20.



HEXOL DOT 4 BRAKE FLUID



Hexol DOT4 Brake Fluid is a high-quality brake fluid. Follow vehicle manufacturer's recommendations when adding or replacing brake fluid. Boiling point: min. 230°C. Wet boiling point: min. 155°C.

■ QUALITY AND SPECIFICATIONS:

DOT 4

SAE J 1704, FMVSS 116, CMVSS 116, ISO 4925 Class 4.









HEXOL DOT 3 BRAKE FLUID



Hexol DOT3 Brake Fluid is a high-quality brake fluid. Follow vehicle manufacturer's recommendations when adding or replacing brake fluid. Boiling point: min. 205°C. Wet boiling point: min. 140°C.

QUALITY AND SPECIFICATIONS:

DOT 3

SAE J 1703, FMVSS 116, CMVSS 116, ISO 4925 Class 3.

HEXOL HEXBLUE



Hexol HexBlue is a substance containing 32.5% urea in deionised water used in the Selective Catalytic Reduction system of Euro IV and V vehicles to neutralize nitrogen oxide gas (Nox).

■ QUALITY AND SPECIFICATIONS:

32.5% UREA SOLUTION DIN 70070, ISO 22241-1.







HEXOL G12+ ALUPRO ANTIFREEZE CONCENTRATE



Hexol G12+ Alupro Antifreeze Concentrate is formulated with special additives (Organic Acid Technology OAT) in order to meet the cooling requirements of modern engines, with aluminium alloy engine bloc, running on gasoline or diesel, that equip both passenger and commercial vehicles. Used all year round, it provides corrosion protection for the entire cooling system's components (non-metal, metal, plastic or rubber), in all engine applications. It does not contain silicates, nitrites, phosphates or amines and it does not require an initial addition of Supplemental Coolant Additives (SCA) for HD applications.

- FREEZING POINT: 1/1 dilution: -35°C; 3/4 dilution: -27°C
- **QUALITY AND SPECIFICATIONS:**

AFNOR NF R 15-601, ASTM D 3306, BS 6580-2010, FFV Heft R443, SAE J1034, Chrysler MS 9176, DAF 74002, Deutz DQC CB-14, Fiat 9.55523, Ford ESE M97B49-A, Ford WSS-M97B44-D, John Deere H24 B1/C1, MAN 324 Type SNF, MB 325.3, Opel GM QL 130100, Renault 41-01-00, VW TL 744D/F (G-12, G-12 Plus).

HEXOL UNIVERSAL ANTIFREEZE CONCENTRATE TYPE G11



Hexol Universal Antifreeze Concentrate Type G11, is formulated with special additives in order to meet the cooling requirements of both gasoline passenger and commercial, heavyduty diesel engines. Contains Inorganic Acid Technology (IAT) inhibitor and is nitrite, amine and phosphate (NAP) free, and includes borate and silicate, in order to offer a good protection against corrosion and wear, of all components of the cooling circuit (aluminium, copper, iron, plastics, and rubber). Meets the requirements of HD Diesel engine manufacturers. This coolant does not require an initial addition of Supplemental Coolant Additives (SCA) for HD applications. It can be used, both in winter and in summer, in internal combustion engines for the cooling system.



- FREEZING POINT: 1/1 dilution: -35°C; 3/4 dilution: -27°C
- QUALITY AND SPECIFICATIONS:

AFNOR NF R 15-601, ASTM D 3306, BS 6580- 2010, SAE J1034, MAN 324 NF, MB 325.0, WV TL744-C (G11);



HEXOL UNIVERSAL ANTIFREEZE DILUTED TYPE G11 -35°C



Hexol Universal Antifreeze Diluted Type G11, is formulated with special additives in order to meet the cooling requirements of both gasoline and diesel passenger, commercial and heavy-duty engines. Contains Inorganic Acid Technology (IAT) inhibitor and is nitrite, amine and phosphate (NAP) free, and includes borate and silicate, in order to offer a good protection against corrosion and wear, of all components of the cooling circuit (aluminium, copper, iron, plastics, and rubber). Meets the requirements of HD Diesel engine manufacturers. This coolant does not require an initial addition of Supplemental Coolant Additives (SCA) for HD applications. It can be used, both in winter and in summer, in internal combustion engines for the cooling system and for central heating. Offers freeze protection up to -35°C.



- FREEZING POINT: -35°C
- QUALITY AND SPECIFICATIONS:

AFNOR NF R 15-601, ASTM D 3306, BS 6580- 2010, SAE J1034, MAN 324 NF, MB 325.0, WV TL744-C (G11);





HEXOL UNIVERSAL ANTIFREEZE DILUTED TYPE G11 -27°C



Hexol Universal Antifreeze Diluted Type G11, is formulated with special additives in order to meet the cooling requirements of both gasoline and diesel passenger, commercial and heavy-duty engines. Contains Inorganic Acid Technology (IAT) inhibitor and is nitrite, amine and phosphate (NAP) free, and includes borate and silicate, in order to offer a good protection against corrosion and wear, of all components of the cooling circuit (aluminium, copper, iron, plastics, and rubber). Meets the requirements of HD Diesel engine manufacturers. This coolant does not require an initial addition of Supplemental Coolant Additives (SCA) for HD applications. It can be used, both in winter and in summer, in internal combustion engines for the cooling system and for central heating. Offers freeze protection up to -27°C.

- FREEZING POINT: -27°C
- QUALITY AND SPECIFICATIONS:

AFNOR NF R 15-601, ASTM D 3306, BS 6580- 2010, SAE J1034, MAN 324 NF, MB 325.0, WV TL744-C (G11);

HEXOL CENTRAL HEATING SYSTEM ANTIFREEZE



Hexol Central Heating System Antifreeze is a high-quality antifreeze, specially formulated to meet the requirements of heating installations with central heating. It can be used as a heating agent in central air conditioning installations (heating, cooling) and as a heating agent in industrial heating-cooling installations.

■ FREEZING POINT:

1/1 dilution: -35°C; 1/2 dilution: -20°C, 1/3 dilution: -14°C





HEXOL ECOSTAR CONCENTRATE



Hexol Ecostar Concentrate is a powerful, ethanol-based, windshield washer anti-freeze, ensuring a perfectly clean windshield during both winter and summer time. It protects against freezing temperatures of up to -40°C. It is an eco-friendly, biodegradable product and it does not contain methanol.

FREEZING POINT: -40°C

HEXOL ECOSTAR DILUTED



Hexol Ecostar Diluted is a powerful, ethanol-based, windshield washer anti-freeze, ensuring a perfectly clean windshield during both winter and summer time. It protects against freezing temperatures of up to -20°C. It is an eco-friendly, biodegradable product and it does not contain methanol.

FREEZING POINT: -20°C





HEXOL STARLIGHT SUPER CONCENTRATE



Hexol Starlight Super Concentrate is a methanol-based, windshield washer anti-freeze formulated with special additives to meet the requirements of a perfect cleaning during winter and summer time. Offers freeze protection up to -70°C. Recommended for professional, commercial use.

■ FREEZING POINT: -70°C

HEXOL STARLIGHT CONCENTRATE



Hexol Starlight Concentrate is a methanol-based, windshield washer anti-freeze formulated with special additives to meet the requirements of a perfect cleaning during winter and summer time. Offers freeze protection up to -35°C. Recommended for professional, commercial use.

FREEZING POINT: -35°C





HEXOL STARLIGHT DILUTED



Hexol Starlight Diluted is a methanol-based, windshield washer anti-freeze formulated with special additives to meet the requirements of a perfect cleaning during winter and summer time. Offers freeze protection up to -20°C. Recommended for professional, commercial use.

FREEZING POINT: -20°C

HEXOL DE-ICER



 $He xol\ De-lcer\ is\ an\ ethanol-based\ liquid,\ specially\ formulated\ to\ quickly\ remove\ ice\ from\ the\ glass\ surfaces\ and\ locks\ of\ vehicles\ and\ other\ means\ of\ transport\ in\ winter.$

FREEZING POINT: -40°C





HEXOL NO BUGS



Hexol No Bugs is a specially formulated windshield washer, designed to improve windshield visibility and the air quality inside the vehicle. It is highly effective at removing insects off the windshield and it leaves a fresh smell inside your vehicle. Avoid using this product in the winter months when outside temperature drops below 0° C.

FREEZING POINT: 0°C

HEXOL NO BUGS CONCENTRATE

A

Hexol No Bugs Concentrate is a specially formulated windshield washer, designed to improve windshield visibility and the air quality inside the vehicle. It is highly effective at removing insects off the windshield and it leaves a fresh smell inside your vehicle. Avoid using this product in the winter months when outside temperature drops below 0°C. Use it diluted with 1 to 3 liters of demineralized water.

FREEZING POINT: 0°C



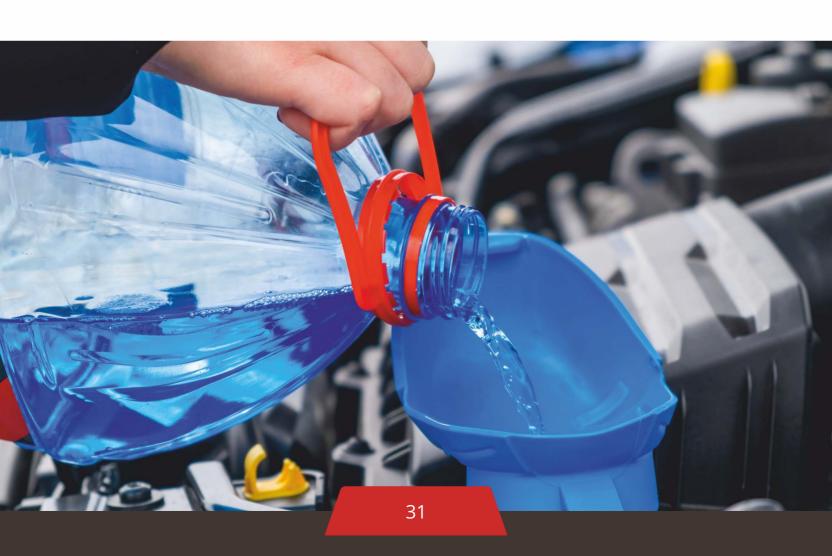


HEXOL OCEAN BREEZE



Hexol Ocean Breeze is a specially formulated windshield washer, bringing the freshness of the ocean breeze inside the vehicle. It easily removes insects off the windshield. Avoid using this product in the winter months when outside temperature drops below 0° C.

FREEZING POINT: 0°C



MOTOR OIL

USER GUIDE



API CLASSIFICATION

What is API?

The American Petroleum Institute is the national association that represents all the aspects of the American oil and natural gasses industry. API ensures the licensing of motor oils and certification system (EOLCS). It is a voluntary licensing and certification program, which authorizes motor oil producer and merchants that fulfill the needed requirements to be able to use API quality certification.

What does API evaluation mean?

The API classification system provides information regarding the motor oil itself. The letter "S" (spark) followed by another letter (for example "SN") indicates the fact that this oil is indicated for engines with a spark ignition. The letter "C" followed by another letter and/or number (for example CI-4) indicates the fact that this oil is suitable for diesel engines (compression ignition). The second letters from the C and S categories are attributed in alphabetical order. The further down the alphabet the higher the quality of the oil is.

The classification of oils in accordance with API (follow automaker recommendations)

S series – gasoline engine motor oils

SP - 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 – Introduced in October 2010 for 2011 and older vehicles, designed to provide improved high temperature deposit protection for pistons, more stringent sludge control, and seal compatibility. API SN with Resource Conserving matches ILSAC GF-5 by combining API SN performance with improved fuel economy, turbocharger protection, emission control system compatibility, and protection of engines operating on ethanol-containing fuels up to E85.

SM — Oils designed for vehicle produced in 2010 and older, to provide improved oxidation resistance, improved deposit protection, better wear protection, and better low-temperature performance over the life of the oil. Some SM oils may also meet the latest ILSAC specification and/or qualify as Energy Conserving. They may be used where API Service Category SJ and SL earlier categories are recommended.

SL — adopted to describe engine oils for use in 2001. It can be used anywhere an oil which meets APISJ or older is recommended

SJ —was adopted in 1996 to describe engine oil first mandated in 1997. It can be used in any application where an API SH oil or older is recommended.

SH — Obsolete — For model year 1996 and older engines. Can be used when an API SG or previous specification is required. Starting with July 1, 1997 API SH can only be used together with API CF, CF-2, CF-4 or CG-4

SG – Obsolete – For model year 1993 and older engines.

SF – Obsolete – For model year 1988 and older engines.

SE – Obsolete – For model year 1979 and older engines.

SD - Obsolete - For model year 1971 and older engines.

SC – Obsolete – For model year 1967 and older engines.

SP	CK-4		GL-6
SN	CJ-4		GL-5 PLUS
SM	CI-4 PLUS	TD	PLUS
SL	CI-4		GL-5
	CH-4		GL 3
SJ	CG-4	TC	GL-4
SH	CF-2		GL-4
SG	CF		GL-3
SF	CF-4	ТВ	
SE	CE		GL-2
	CD-JJ		
SD	CD	AT	C1 1
SC	CC		GL-1
S Series	C Series	T Series	GL Series

C series - Diesel engine motor oils

CK-4 - motor 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)

CJ-4 — Designed for high-speed, four-stroke diesel engines to meet 2007 on highway exhaust emission standards as well as Tier 4 non-road, along with previous diesel engines.

CI-4 Plus — Contains motor oils used in four-stroke diesel engines designed after 2004. This oil has good energy conserving properties.

CI-4- Contains motor oils used in four-stroke diesel engines designed after 2002 that work in severe conditions. It cabe applied also in cases where the oil recommended has to meet API CH-4, CG-4 and CF-4 requirements.

CH-4- Contains motor oils used in four-stroke diesel engines designed after 1998 that work in severe conditions. It can be applied also in cases where the oil recommended has to meet API CF-4 and API CG-4 requirements.

CG-2 - Contains motor oils used in four-stroke diesel engines designed after 1994 that work in severe conditions. It can be applied also in cases where the oil recommended has to meet APICD, CE and CF-4 requirements. It can be applied also in cases where the oil recommended has to meet APICD, CE and CF-4 requirements. It can be applied also in cases where the oil recommended has to meet APICD, CE and CF-4 requirements. It can be applied also in cases where the oil recommended has to meet APICD. The can be applied also in cases where the oil recommended has to meet APICD. The case is the case is

 $\textbf{CF-2} - \textbf{Obsolete-Contains motor oils used in two stroke diesel engines designed after 1004. It can be applied in cases where the recommended oil is an API CD-2. A contained of the contain$

CF-Contains motor oils used in diesel engines with direct injection designed after 1994. Can also be used in applications where APICD or previous oil is recommended.

CF-4- Contains motor oils used in diesel engines designed after 1990. It ensures the maintenance of high-speed, four-stroke engines. These oils can also replace API CE and are adequate for heavy trucks. They can also be combined with applications from the S category (gasoline oils).

CE-Obsolete-Contains motor oils used in diesel designed after 1983. Can also be used in applications where APICD or previous oil is recommended.

 $\textbf{CDII} - \textbf{Obsolete-Contains motor oils used for two-stroke diesel engines that work in severe conditions and require protection against deposits and wear and tear. \\$

CD- Obsolete-Contains oils used in naturally a spirated or turbo diesel engines, which use a lot of fuel (including fuels high in sulfur). This type of oil has been introduced in 1955. In the containing fuels high in sulfur in the containing fuels high in sulfur. The containing fuels high in sulfur in the containing fuels high in sulfur in the containing fuels high in sulfur. The containing fuels high in the containing fuels high in sulfur in the containing fuels high in sulfur in the containing fuels high in the containing fuel high in the c

CC-Obsolete-Contains oils used in diesel engines. This series of oils should never be used in diesel engines produced after 1990. The contains of the con

T series – oils for two-stroke engines

TA-This specification is used for extremely small two-stroke engines used in mopeds.

TB-This specification is used for scooters and motorcycles with two-stroke engines.

TC-This specification is used for high performance with engines with high fuel-oil ratio. Oil with this specification use metal-based additives that produce ash.

TD-This specification is used for water-cooled outboard two-stroke engines with separate oil container or mixed (oil with fuel).

G series – gear oils

GL-1- Denotes lubricants intended for manual transmissions operating under mild conditions that straight petroleum or refined petroleum oil may be used satisfactorily. Oxidation and rust inhibitors, defoamers and pour depressants may be added to improve the characteristics. Friction modifiers and extreme pressure additives shall not be used.

GL-2- Denotes lubricant intended for automotive worm-gear axles operating under conditions of load and temperature that lubricants satisfactory for API GL-1 service nor suffice.

GL-3-Denotes lubricants intended for manual transmissions operating under moderate to severe conditions and spiral-bevel axles operating under mild to moderate conditions.

GL-4- Denotes lubricants intended for axles with spiral bevel gears operating under moderate to severe conditions of speed and load or axles with hypoid gears operating under moderate speeds and loads. These oils may be used in selected manual transmission and transaxle applications where MT-1 lubricants are unsuitable. The manufacturer's specific lubricant quality recommendations should be followed.

GL-5 — Denotes lubricants intended for gears, particularly hypoid gears, in axles operating under various combinations of high-speed/shock load and low-speed/high-torque conditions.

GL-6- Denotes lubricants intended for gears designed with a very high pinion offset. Such designs typically require protection from gear scoring in excess of that provided by APL GL-5 gear oils.

MOTOR OIL

USER GUIDE



ACEA CLASSIFICATION

What is ACEA?

Associtation des Constructeurs Européens d'Automobiles - The European Automobile Manufacturers Association (ACEA), founded in 1991, represents the interests of fifteen European car, truck and bus manufacturer at EU level. Though its specialist working groups and an extensive network of individual experts from Member Companies at all levels of the industry, ACEA has access to a wealth of expertise and applied technical experience. ACEA oil sequences define the minimum quality level of a product for presentation to ACEA members.

Category A/B – gasoline and diesel engines; Category C - catalyst compatible oils; Category E - heavy truck and diesel engines;

ACEA Category A/B

ACEA A1/B1 - withdrawn - For gasoline vehicle engines and for light truck diesel engines that require oil with low

ACEA A3/B3 - withdrawn - Stable, stay-in-grade engine oil intended for use in passenger car and light-duty gasoline & diesel engine and/orfor extended oil drain intervals where specified by the engine manufacturer.

ACEA A3/B4 — Stable, stay-in-grade engine oil intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines, but also suitable for applications described under A3/B3.

ACEA A5/B5 — Stable, stay-in-grade engine oil intended for use at extended oil drain intervals in pas and light-duty gasoline & DI diesel engines designed for low viscosity engine oils with HTHS viscosity of 2.9 to 3.5

ACEA A7/B7 – Stable, stay-in-grade engine oil intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines designed for low viscosity engine oils with HTHS viscosity of 2.9 to 3.5 mPa-s. Relative to A5/B5 these engine oils provide also low speed pre-ignition- and wear protection for turbocharged gasoline DI engines as well as turbocharger compressor deposit (TCCD) protection for modern DI

ACEA Category C

ACEA C2 — Stable, stay-in-grade engine oil with mid-SAPS Level, for aftertreatment system compatibility. Intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines designed for low viscosity engine oils with a minimum HTHS Viscosity of 2.9 mPars.

ACEA C3 — Stable, stay-in-grade engine oil with mid-SAPS Level, for aftertreatment system compatibility. Intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines designed for engine oils with HTHS viscosity of minimum 3.5 mPa-s.

ACEA C4 — Stable, stay-in-grade engine oil with low-SAPS Level, for aftertreatment system compatibility. Intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines designed for engine oils with HTHS viscosity of minimum 3.5 mPa-s.

ACEA C5 — Stable, stay-in-grade engine oil for improved fuel economy, with mid-SAPS Level, for aftertreatment system compatibility. Intended for use at extended oil drain intervals in passenger car and light-duty gasoline & DI diesel engines designed and OEM-approved for engine oils with HTHS viscosity of minimum 2.6 mPa-s.

ACEA C6 — Relative to C5 these engine oils provide also low speed pre-ignition and wear protection for

turbocharged gasoline DI engines as well as turbocharger compressor deposit (TCCD) protection for modern DI

*SAPS — Sulfated Ash, Phosphorous, Sulfur; **HTHS — High Temperature High Shear, viscosity at 150 °C

ACEA Category E

ACEA E2 — Standard quality oil for use with naturally aspirated or turbo diesel engines

ACEA E4 — Stable, stay-in-grade oil providing excellent control of piston cleanliness, wear, soot handling and lubricant stability. It is recommended for highly rated diesel engines meeting Euro I, Euro II, Euro IV and Euro V emission requirements and running under very severe conditions. It is suitable for engines without particle filters, and for some EGR engines and some engines fitted with SCR NOx reduction systems.

ACEA E5 — It is suitable for diesel engines meeting Euro I, Euro II, Euro II, Euro IV emissions requirements.

ACEA E6 — Stable, stay-in-grade oil providing excellent control of piston cleanliness, wear, soot handling and lubricant stability. It is recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV, Euro V and Euro VI emission requirements and running under very severe conditions, e.g. significantly extended oil drain intervals according to the manufacturer's recommendations. It is suitable for EGR engines, with or without particulate filters, and for engines fitted with SCR NOx reduction systems. E6 quality is strongly recommended for engines fitted with particulate filters and is designed for use in combination with low sulphur diesel fuel.

ACEA E7 — Stable, stay-in-grade oil providing effective control with respect to piston cleanliness and bore polishing. It further provides excellent wear control, soot handling and lubricant stability. It is recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV and Euro V emission requirements and running under severe conditions, e.g. extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines without particulate filters, and for most EGR engines and most engines fitted with SCR NOx reduction systems.

ACEA E8 - Stable, stay-in-grade oil providing excellent control of piston cleanliness, wear, soot handling and Laber 26 - Stable, 3:43-III-grade on provinging extenent control or piston (earliness, wear, soot nationing and lubricant stability, it is recommended for highly-rated diesel engines meeting Euro I, Euro II, Euro III, Euro III consulted if in doubt

ACEA E9 - Stable, stay-in-grade oil providing effective control with respect to piston cleanliness and bore polishing. It further provides excellent wear control, soot handling and lubricant stability. It is recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV, Euro V and Euro VI emission requirements and inginjy fated dieser engines meeting curot, curot, curoti, curotiv, curotiv, curotiv, curotiv and curotiv requirements and running under severe conditions, e.g. extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines with or without particulate filters, and for most EGR engines and for most engines fitted with SCR NOx reduction systems. E9 is strongly recommended for engines fitted with particulate filters and is designed for use in combination with low sulphur diesel fuel.

ACEA E11 - Stable, stay-in-grade oil providing effective control with respect to piston cleanliness and bore polishing. It further provides excellent wear control, soot handling and lubricant stability. It is recommended for polishing. It Turther provides excellent wear control, soot handling and lubricant stability. It is recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV, Euro V and Euro V le mission in requirements and running under severe conditions, eg extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines with or without particulate filters, and for most EGR engines and for most engines fitted with SCR NOx reduction systems. E11 is strongly recommended for engines fitted with particulate filters and is designed for use in combination with low-sulphur diesel fuel. However, recommendations may differ between engine manufacturers so driver manuals and/or dealers should be consulted if in doubt.

The DEXRON classification for ATF -Automatic Transmission Fluid

Type A - Introduced by Ford (GM) in 1949

Type A Suffix A - Introduced by Ford (GM) in 1957 and replaced Type A

Dexron B - Introduced by Ford (GM) in 1967

Dexron II - the same GM formula enhanced with better viscosity control

Dexron IIE - Oil for electronic transmission

Dexron III (F) - Replaces Dexron IIE and has increased anticorrosive properties

Dexron III (H) - The enhanced version of the Dexron III that was introduced in 2003

Dexron III/Saturn - Oil specially created for Saturn cars

Dexron VI - Introduced in 2006 for GM hydromantic 6L80 vehicles, replacing Dexron II and III

SAE Classification – Society of Automotive Engineers

This classification has at its basis the measurement of viscosity at various temperatures both high and low. The values registered at high temperatures are determined in accordance with the ASTM D445 method. Values at low temperatures are determined in accordance with ASTM D2983 method. The apparent viscosity is measured using a Brookfield viscometer and is measured in mPa/s(cP). Multigrade oils satisfy a certain requirement in low temperatures marked with a "W" (for winter) and different requirement for non-W category at high temperatures. Also, important to note that there is no correlation between the SAE classification of motor oils and that of transmission oils

LOWEST AMBIENTAL TEMPERATURE	SAE VISCOSITY GRADE RECOMMENDE FOR PASSENGER CARS
0°C(32°F)	0W-20,0W-30,5W-20,5W-30,10W-30,10W-40,20W50
-18°(0°F)	0W-20,0W-30,5W-20,5W-30,10W-30,10W-40
Sub-18°C (0°F)	0W-20,0W-30,5W-20,5W-30

USER GUIDE



ISO Classification

What is ISO?

International Organization for Standardization (ISO) is a private NGO that has been founded in 1987 with its headquarters in Geneva. ISO members are national bodies of standardization from over 110 countries amongst which also Romania. Romania's representation in ISO is done by ASRO—the Romanian Association of Standardization, a public non-profit organization.

The ISO 3448 viscosity classification

ISO classification is recommended specifically for industrial applications. The reference temperature is of 40°C and it represents the operating temperature in machinery. Each subsequent Viscosity grade (VG) within the classification has approximately a 50% higher viscosity then that of the preceding one, and a viscosity range of $\pm 10\%$ from the mid-point is permitted. For example, ISO VG22 refers to a mid-point viscosity of 22 cSt at 40°C and a $\pm 10\%$ variation. The classification implies no quality evaluation and provides information only on the viscosity at 40°C. The viscosity at different temperatures can be calculated using the viscosity at 40°C and the viscosity index (VI), which represents the temperature dependency of the lubricant. Method descried by ASTM D2270.

ISO 3448	Kinematic viscosity @ 40°C [mm2/s]		
Viscosity grades	Middle value	Minimum	Maximum
ISOVG2	2,2	1,98	2,42
ISOVG3	3,2	2,88	3,52
ISOVG5	4,6	4,14	6,06
ISOVG7	6,8	6,12	7,48
ISOVG10	10	9,0	11,0
ISOVG15	15	13,5	16,5
ISOVG22	22	19,8	24,2
ISOVG32	32	28,8	35,2
ISOVG46	46	41,4	50,6
ISOVG68	68	31,2	74,8
ISO VG 100	100	90	110
ISO VG 150	150	135	165
ISO VG 220	220	198	242
ISO VG 320	320	288	352
ISO VG 460	460	414	506
ISO VG 680	680	612	748
ISO VG 1000	1000	900	1100
ISOVG1500	1500	1350	1650

DIN Classification

Deutsches Institut für Normung e.V (DIN) is the German organization responsible for quality classifications. It was founded in 1972 and is part of the TÜV Rheinland group as of 2005.

HYDRAULIC OILS

ISO 6743-4 CLASSIFICATION OF HYDRAULIC BASE OILS

ISO-L-HH Hydraulic oils, formulated from mineral oils without inhibitors

ISO-L-HL Standard quality oils used in oil circulation systems and in hydraulic circuits. They are formulated from paraffinic base oils with antioxidant and antirust additives

ISO-L-HM Superior quality oils used in all types of hydraulic systems formulated from paraffinic base oils with anti-wear, antirust, and antioxidant additives

ISO-L-HR HL type oils with a high viscosity index

ISO-L-HV Specially formulated oils to be used in hydraulic systems that require fluids with a high viscosity index and a low pouring point

ISO-L-HG HM type oils with shock absorption properties

ISO-L-HS Synthetic oils

DIN 51524 CLASSIFICATIONS

DIN 51524 Part 1 HL standard hydraulic oils, formulated from paraffinic base oils with antioxidant and antirust additives (ISO-L-HL)

DIN 51524 Part 2 HLP Superior quality hydraulic oils, formulated from paraffinic base oils with anti-wear, antirust, and antioxidant additives (ISO-L-HM)

DIN 51524 Part 3 HVLP(HVI) High index viscosity hydraulic oils, compatible with hydraulic systems that work in a variety of climates and temperatures (ISO-L-HV)

DIN 51524 Part HLPD High-performance hydraulic oils, formulated from base oils with anti-wear, antioxidant, antirust and detergent additives, which absorb a quantity of water without changing the properties of the oil. Recommended for use in places where oil contamination with water is possible (ISO-L-HM)

INDUSTRIAL OILS

USER GUIDE



INDUSTRIAL GEAR OILS

ISO 6743-6 CLASSIFICATION

CKB Mineral base oil that contains antioxidant, antirust and antifoaming additives

CKC CKB mineral base oils that contains anti-wear and extreme pressure additives

CKD CKC type base oil that can be used in high temperature with high degree of thermal and oxidation stability

CKE CKB type oil with a low friction coefficient

CKS Oil with anticorrosive and antifriction additives that can be used in extreme temperatures with a high degree of oxidation stability

CKT CKS type oil used in heavy-duty applications

CKG Grease with anti-wear properties that can be used in high-pressure applications

CKH bituminous oil with antirust properties

CKJ CKH type oil with anti-wear properties that can be used in high-pressure application

CKL Greases with good thermal stability and anti-wear, antirust additives that can be used in high-pressure applications

CKM Heavy-duty oils with antirust properties

DIN 51517 CLASSIFICATION

DIN 51517 Part 1 - C – Oil without additives used to lubricate through immersion

DIN 51517 Part 2 – CL-Industrial gear oil enhanced with anticorrosion, anti-wear, antirust and anti-oxidation additives

DIN 51517 Part 3 – CLP – Industrial gear oil with very good anticorrosion and anti-wear properties characteristic to friction points for continuous use and lubrication though immersion

TURBINE OIL

ISO 6743-5 CLASSIFICATION FOR STEAM TURBINES

ISO-L-TSA — highly refined mineral base oil that contains rust and oxidation inhibitors

ISO-L-TSE — TSA type oil for heavy-duty use

ISO-L-TSD — Oil based on phosphate esters that are fire retardant

ISO 6743-5 CLASSIFICATION FOR GAS TURBINES

ISO-L-TGA — Highly refined mineral base oil that contains rust and oxidation inhibitors

ISO-L-TBG — Highly refined minerals base oil that contains rust and oxidation inhibitors for turbines working at high temperatures

ISO-L-TBE – TGA type oil for heavy-duty use

ISO-L-TBF — TGB type oil for turbines that work heavy-duty at high temperatures

ISO-L-TBCH — Polyalphaolefin based turbine oil

ISO-L-TBCE — Ester based synthetic turbine oil

ISO 6743-5 CLASSIFICATION FOR TURBINES WITH COMBINED CYCLES

ISO-L-TGSB - Highly refined oil that contains rust and oxidation inhibitors that work at high temperature

ISO-L-TGSE - TGSB type oils for heavy-duty use that works at high temperatures

DIN 51515 CLASSIFICATION

DIN 51515 Part 1-L-TD- Oil for turbines operating at normal temperatures

DIN 51515 Part 2-L-TG- Oil for turbines operating at high temperatures

COMPRESSOR OIL

ISO 6743 -3A CLASSIFICATION

ISO-L-DAA- Selected paraffinic based oil for lubricating air compressors with antioxidant, antirust and anti-wear additives

ISO-L-DAB - Polyalphaolefin based oil for piston compressors enhanced with antioxidant, antirust, anti-wear additives that operate in medium loads

ISO-L-DAG- Selected paraffinic based oil specially formulated for the lubrication of air compressors with antioxidant, antirust and anti-wear additives

ISO-L-DAH - Polyalphaolefin based synthetic oil specially formulated for the lubrication of air compressors with antioxidant, antirust and anti-wear additives

DIN 51506 CLASSIFICATION

DIN 51506 VBL Oil for compressors operating at temperatures of up to 140°C

DIN 51506 VCL Oil for compressors operating at temperatures of up to 160°C

DIN 51506 VDL Oil for compressors operating at temperatures of up to 220°C

GREASES USER GUIDE



GREASE CLASSIFICATION NLGI CONSISTENCY - ASTM D217

000 445 to 475 00 400 to 430 0 355 to 385 1 310 to 340 2 265 to 295 3 220 to 250 4 175 to 205 Semi - Fluid Butter like	NLGI NUMBER	WORKED 60 PENETRATION AT 25°C (TENTHS OF A MILLIMETER)	RELATIVE Appearance
0 355 to 385 1 310 to 340 2 265 to 295 3 220 to 250 Butter like 4 175 to 205	000	445 to 475	
1 310 to 340 2 265 to 295 3 220 to 250 Butter like 4 175 to 205	00	400 to 430	Semi - Fluid
2 265 to 295 3 220 to 250 Butter like 4 175 to 205	0	355 to 385	
3 220 to 250 Butter like 4 175 to 205	1	310 to 340	
4 175 to 205	2	265 to 295	
	3	220 to 250	Butter like
5 130 to 160	4	175 to 205	
3 130 t0 100	5	130 to 160	
6 85 to 115 Hard	6	85 to 115	Hard

GREASE CLASSIFICATION - ISO 6743-9

EXAMPLE: ISO - L - X - BCEB2

FAMILY	TEMPE	RATURE	TEMPE	RATURE	BEHAVIO	R IN PRESEN	ICE OF WATER	EP PERFORMANCE	NLGI	PENETRATION
	Symbol 1	Mini T°C	Symbol 1	Maxi T °C	Symbol 3	Anti rust	Environment	Symbol 4	GRADE	AFTER 60 STROKES
	Α	0	Α	60	Α	L	L		000	445-475
	В	-20	В	90	В	M	L	Α	00	400-430
	C	-30	C	120	C	Н	L	NON EP	0	355-385
	D	-40	D	140	D	L	M	GREASE	1	310-340
Х	E	>-40	E	160	Е	M	М		2	265-295
			F	180	F	Н	M	В	3	220-250
			G	>180	G	L	Н	EP	4	175-205
					Н	M	Н	GREASE	5	130-160
					1	Н	Н		6	85-115

GREASE CLASSIFICATION - DIN 51502

EXAMPLE: KP2K - 25

KIND OF GREASE C - APPLICATION AREA	HARACTER	LOWEST APPLICATION TEMPERATURE DIN 51 805 AT 1400MBAR °C
Greases for bearings and sliding according to DIN 51 825	K	-10
Greases for closed gears according to DIN 51 826	G	-20
Greases for open gears	OG	-30
Greases for friction bearings/sealing	M	-40

ADDITIONAL INFORMATION REGARDING ADDITIVES	CHARACTER
Solid lubricants added (MoS2, Graphite)	F
Ester	E
Fluor Hydrocarbons	FK
Polyglycol	PG
Siliconoil	SI
EP additive	Р

NLGI GRADE
000
00
0
1
2
3
4
5
6

DIN 51 502	APPLICATION TEMPERATURE °C	WATER ACCORDING TO DIN 51 807 PART 1
C	+60	0-40 or 1-40
D		2-40 or 3-40
E	+80	0-40 or 1-40
F		2-40 or 3-40
G	+100	0-90 or 1-90
Н		2-90 or 3-90
K	+120	2-90 or 3-90
M		To be reported
N	+140	To be reported
Р	+160	To be reported
R	+180	To be reported
S	+200	To be reported
Υ	+220	To be reported
U	Above 240	To be reported

BEHAVIOR IN PRESENCE OF

HIGHEST

CHARACTER

PASSENGER CARS LUBRICANTS & CHEMICALS

TRANSMISSION OILS: **HEXOL AUTOMATIC**

Synline ATF Torsion Dexron III H



TRANSMISSION OILS: **HEXOL MANUAL**

SYNLINE TORSION 75W90 **SYNLINE TORSION 75W80** STANDARD 80W90 **TORSION GL5-LS TORSION 80W90**



NO BUGS

HEXOL WINDSCREEN

WASHER FLUID:

OCEAN BREEZE

DE ICER

ECOSTAR

ANTIFREEZE UNIVERSAL TYPE G11 ANTIFREEZE ALUPRO G12+ **HEXOL COOLING FLUIDS:**



HEXOL GREASES:

LI EP 2 COMPLEX BLUE LONGLIFE LI-EP2 SUPREME **LI2 STANDARD**

CA SX - 1/2 ULTRA LI CA2 PREMIUM CAG2 OPTIMUM CA3 PREMIUM



HEXOL SPECIAL LIQUIDS: **DOT-4 BRAKE FLUID DOT-3 BRAKE FLUID** HEXBLUE





TURBODIESEL 10W40 / 15W40

SYNLINE SPRINT 10W30 / 10W40

SPRINT 15W40

SYNLINE SUPERDIESEL 5W30

SYNLINE ULTRADIESEL 5W30 / 5W40 SYNLINE SPRINTPLUS 5W30 / 5W40

HEXOL ENGINE OILS:

CLES LUBRICANTS & CHEMI

HEXOL ENGINE OILS:

SYNLINE SUPERTRUCK 10W40 SYNLINE ULTRATRUCK MAXX **SUPERTRUCK 15W40** 5W30 / 10W30 / 10W40 / 15W40 SYNLINE ULTRATRUCK 5W30 / 10W30 / 10W40 / 15W40



WASHER FLUID: **HEXOL WINDSCREEN**

STARLIGHT **ECOSTAR** DE ICER



HEXOL COOLING FLUIDS:

ANTIFREEZE ALUPRO G12+ ANTIFREEZE UNIVERSAL TYPE G11





HEXOL SPECIAL LIQUIDS:

DOT-3 BRAKE FLUID DOT-4 BRAKE FLUID HEXBLUE



HEXOL AUTOMATIC TRANSMISSION OILS:

ATF DEXRON II Synline ATF Torsion Dexron III H

TRANSMISSION OILS: HEXOL MANUAL

SYNLINE TORSION 75W80 SYNLINE TORSION 75W90 TORSION 80W90 TORSION 80W90-LS





HEXOL GREASES:

LI EP 2 COMPLEX BLUE LONGLIFE LI-EP2 SUPREME

LI-EP 00 CENTRAL LI2 STANDARD

LI CA2 PREMIUM

HEXOL HYDRAULIC OILS: PREMIUM HV 32 / 46 / 68

CA SX 1/2 ULTRA LI CA2 STANDARD

CA2 STANDARD CA3 PREMIUM CAG2 OPTIMUM

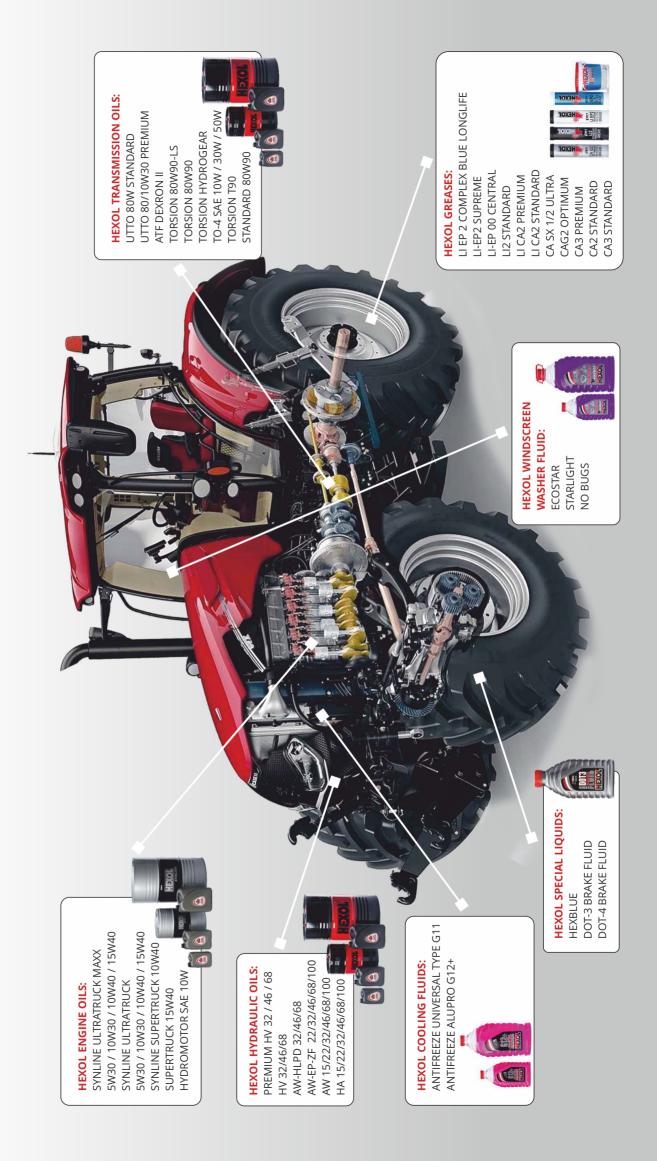
CA3 STANDARD

HA 15/22/32/46/68/100 AW 15/22/32/46/68/100 AW-EP-ZF 22/32/46/68/100 AW-HLPD 32/46/68 HV 32/46/68





HEAVY DUTY VEHICLES LUBRICANTS & CHEMICALS



RECOMMENDATIONS FOR COMMERCIAL VEHICLES HEXOL® ENGINE OIL

EMISSION	DPF	E GR	SCR	LOW SAPS	LOW SULPHUR	ОТНЕВ	N O I N
					DIESEL		
Euro I	×	×	×	×	×		HEXOL Standard 15w40, HEXOL Standard 20w40, HEXOL Standard 20w50, HEXOL TurboDiesel 15w40
Euro II	×	×	×	×	×		HEXOL TurboDiesel 15w40
Euro III	×	×	×	×	×	Electrically controlled high pressure injector	HEXOL SuperTruck 10w40, HEXOL SuperTruck 15w40
, i	>	V Light EGR, EGR	×	>	>	Light EGR, EGR: MAN, Scania	HEXOL SuperTruck 10w40,
	>	×	>	<	<	AdBlue to SCR. SCR: Mercedes, Volvo, Iveco, DAF, Cummins, etc.	HEXOL SuperTruck 15w40
7 (2)	>	V Heavy EGR	X	×	>	Heavy EGR, AdBlue to SCR. SCR: Mercedes, Volvo, Iveco, DAF, Cummins, etc. EGR: MAN, Scania	HEXOL SuperTruck 10w40,
	>	×	>		>		HEXOL SuperTruck 15w40
17.0	>	V Heavy EGR	>	>	>	Exception: Scania (only heavy EGR) and JCB's Ecomax engin (neither PDT, nor EGR)	HEXOL UltraTruck 10w40,
	>	X	>	>	>		HEXOL UltraTruck 15w40

■ COMMENTS: Definitions in the chart for an OEM is not certainly valid for all engine type of the given OEM.

DPF: diesel particulate filter

EGR: exhaust gas recirculation

SCR: selective catalytic reduction

LOW SAPS: low level of sulphated ash, phosphorous and sulphur

LOW SULPHUR DIESEL: diesel fuel with lower level of sulphur

HEXOL® SUBSTITUTION CHART FOR PASSENGER VEHICLES

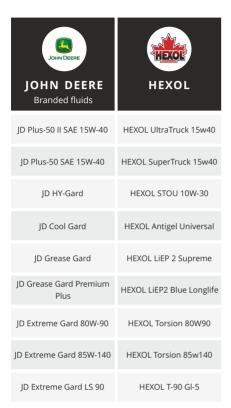
MOL	DYNAMIC GOLD LONGLIFE	DYNAMIC PRIMA 5W40	ESSENCE 5W40	ESSENCE 10W40
MOTUL	8100 X-CLEAN+ 5W30	X-CLEAN SW40	8100 X-CESS 5W40	4100 TURBOLIGHT 10W40
Mobil	ESP FORMULA 5W30	ESP FORMULA SW40	×	SUPER 2000 X1 10W40
Istratine	SYNPOWER XL-III C3 SAE 5W30	SYNPOWER MST C3 SAE 5W40	SYNPOWER SAE 5W40 & MAXLIFE SAE 5W40	DURABLEND SAE 10W40
TOTAL	QUARTZ INEO LONG LIFE 5W30	×	QUARTZ 9000 5W40	QUARTZ 7000 ENERGY 10W40
SHELL	HELIX ULTRA ECT 5W30 & HELIX ULTRA ECT C3 5W30	×	HELIX ULTRA 5W40 & HELIX HX8 SYNBTHETIC 5W40	HELIX HX6 10W40 & HELIX HX5 SL/CF, A2/B210W40
©CASTROL	EDGE 5W30 LL	EDGE TURBO DIESEL 5W40	EDGE 5W40 A3/B4	×
DY NAMAX	PREMIUM ULTRA LONGLIFE 5W30	ULTRA PLUS PD 5W40	PREMIUM ULTRA PLUS 5W40	PREMIUM UNI PLUS 10W40
HEXOL	SYNLINE ULTRADIESEL DPF SW30	SYNLINE ULTRADIESEL DPF 5W40	SYNLINE SPRINTPLUS 5W40	SYNLINE SPRINT 10W40
SPECIFICATIONS	ACEA C3, ACEA A3/B4, API CF/SN, CF/SM; BMW LL-04, VW 504.00, 507.00, PSA B71 2312, Renault RN0720, Ford WSS-M2C946A, Porche C30, Fiat 9,55535-S2, MB 229,51, Honda HTO-06, ILSAC GF-5/4, GM Dexos2, GM 6094M	ACEA C3, ACEA A3/B4, API CF/SN, CF/SM; BMW LL-04, VW 502.00, 505.00, 505.01, Renault RN0720, PSA B71 2312, Fiat 9.55535-52, MB 229.51, Porche C30, Ford WSS M2C917-A	API SN, SM/CF, ACEA A3/B4; BMW LL-04, WW 502.00, 504.00, 505.00, Porsche C30, MB 229.5, Fiat 9.55535-N2, Renault 0710, PSA B71 2296, Jaso DL-1	API SL/CF, ACEA A3/B4; WW 500.00, 501.01, 505.00, MB 229.1, Renault 0700, Ford WS-M2, PSA B71 2294, B71 2300, Fiat 9.55535-H2

HEXOL®

SUBSTITUTION CHART FOR COMMERCIAL VEHICLES

MANNOL	MANNOL UHPD TS-17 Blue 5W30	"ACEA EGGE; API CK-4; WB APPOWAL 22S; TO(LVO, USS 45; CUMMINIS CES 20078 45; CUMMINIS CES 20078 3677; MCCO MCE B 65-2016). DAF (ACEA 66-2016). DETROIT DIESE, DOCEASZZ, SCANIA LDF-4; REMULT RID-3, MANCA EOS-4; CATERPILLAR ECF-3*	UHPD TS-7 Blue 10W40	ACEA EGEPTES, API CK-4/CJ-4;, MB 228.1; MANINGA77, MB 228.1; MANINGA77, MB 228.1; MMU DDC Caterpillar ECFA, Commins CES 2081; Mark ECA, Commins CES 2081; Mark ECA, Permium Plus, Rehault RID-3; DQC IV-10 LX-DEUTIC Dessel 93K218	UHPD TS-5 10W40	ACEA E7/A3984 API CL4/CH- 4/3L, JASO DH-1; CATEGHLLAR EFEH-3. COMMISS CES20076/2007/120078; Deuto D(C-III; MB 228.3; MAN 3275; Vade EO-N, EO-M Plux; Renault RLD- 2, Volvo VDS-3;	SHPD TS-4 Extra 15W40	ACEA E7/A3884 API CL4/SL; JASO DH-1; CATERPILLARE ECF-1- a; CUMMINS CES 20078; DETROT DESEL 193ACT; DEUTZ DQC (IHQS; MACK EGAN, CACH PIUS, MACK EGAN, 228.8.3, MAC 2291; MYL DDC Type 2; RENAULT VI RLD-2; VOLVO VDS-3	SHPD TS-1 15W40	ACEA E7/A3/B3, API CH-4/5L, MB228.3; MAN 3275; MTU Type 2; Volvo VD5-2
ALC. MONITOR TOWN	MT-TRUCK 5W-30 LS	ACEA EG/E7/E9, API CK-4, API SN; ASO DH-2, Caterpillar ECF- 3, Actumento ECF- DQC (W-10L/A) Detroit Diesel DPE 59/ESC-2, AMA 367/73777, MTU Type 3-1, Renault RLD- 3/RLD-4, Scanla Low Ash. Volvo	MT-Truck 10W40 LS Plus	ACEAED, APICKA, CJ4, CJ4, SN, Cummer CEE 20, SN, Cummer CEE 20, SN, Cummer CEE 20, SN, CEE, S	MT-Truck 10W40	ACEA E7, API CI-4/SL, Global DhD-1, Georgipia FCE-2, Outminns CES 2007/77, DDC OSCHOOL OF CONTROL OF CONTROL EAVLO WORKS MAN IN 22/S-1, MTU Type Z. Renault R.D-2, 1, MTU Type Z. Renault R.D-2,	MT-Truck 15W40 SHPD	API CL4/SL, ACEA E7, Global DHD-1, Caterpillar EGF-2, Deutz DGC-11, Neco 18-1894 T2 E7, Mark EO-N, EO-M Bus, MTU Type 2, MM 3275, Renault RLD-2, Tatra TDS 30/12, Volvo	MT-Truck 15W40 Plus	ACEA E3, API CG-44/SJ, Iveco 18- 1804 T2 E3, MAN 3275, MTU Type-2, Remaulf RG.D, VOLVO WOS-3,
FUCHS	Titan Cargo Maxx SAE 5W30	ACEA E9/E7/E6/E4, API CL4; CAT ECF3-DENTZ DOC WIND LX, DENDUZ DOC WIND LX, DENDUZ DOC WIND LX, DENDUZ DOC WIND LX, AND ME STEPANAM MA 3777 MAR. PRED LX, MITU DOC TYPE Z1, MITU DOC TYPE Z1, MIT	Titan Cargo Max 10W40	ACEA BOFF/FERFE, API CJCaterpille TEC3. CUMMINS CES 20031: Deutz DOC NJ.O. LA NECO 18-1804 CLASE ETS. ES.Jaso DH-Z. Mack ED-O. Permium Plus, Man M. 3271-14, MB 2283.1MB 22851, MIVU DDC Typs 31, Renault RLD-3, Scanla	Titan Cargo MC 10W40	ACEA E7/E4; API CI-4; GLOBAL, DPID-1; CUMMINS CES 20077/81; DE ITATO DOES LO SAVESTS. DE UTZ DOCU II-10; NECO 18: MOSE, MOSE CEN A POLSE, ENVIRON DE SENTINO DEC 19: MOSE MOSE CENTRO DE SENTINO DE UTATO	Titan Truck Plus 15W40	ACEA E7, API CL-4/3L, GLOBAL CUMMINS CES 2007/57/8; DEFINDO TO DESEL 9304/57/8; DEUT DO DEUT DO DEUT DO TO N. MAN MA 3275-1, MB-D N. PAN MA 3275-1, MB-D PPE 2; RENAULT RLD/RLD.? YOLVO VDS-3	Titan Universal HD 15W40	API CG-4/CFSL, ACEA E2, ACEA A383, MADARROVAL 229 1; MTU DDC TYPE Z MILL-2104 EALLISON CA-CASE MS 1120; MACK ED-L; MAN Z71; NH 33GC, STEYR A-202, VOLVO VDS; VW 501 01/505 00
Mobil	Delvac 1™ ESP 5W-30	ACEA ESIACEA ETIACEA E9, APICAS (GACIO DH 2) DAFERRENDED DEBIT CATERPILLAR ECF-3	Delvac XHP ESP M 10W40	API CJ-4/CL-4, A/CEA E9/E7/E6/E4, Catepullar CEP.2 Cummins CES. 2008 I. DAF Exerned Drain, MacK EO-D Premium Hiss, MAN M 3277,	Delvac MX Extra 10W40	ACEAET, API CH4, CH4, CG4, CF4, CG4, CF4, CF, SL9, Mai 2283, MAN MAZZZ, YOWO VOS-3VOS-2, MAN MACK ECM Plus, ECN4, Remain ECP4, Cummins CES 2007/1727/6/77/78, Detroit Diesel 77E, 270	Delvac MX 15W40	ACEAE7, API CL4, CG-4, C	Delvac Super 1400 15W40	API CG-4/CH-4/Sj, ACEA E3, YONO VDS-2
SHELL	RIMULA ULTRA 5W30	API CL4, CL4, CL4, CG4, CC4, CC4, CC7, CA, CC4, CC4, CC4, CC4, CC4, CC4, CC4,	Rimula R6 LM 10W40	API C4, C14, C14, C64, CF4, CF4, CF6, E6Eg, Caterpillar EF. S. Cummins CES 2008; 1 Deutz DQC W410 b. WRCEO NG. Perminan Uss: WAN MAS DH-2, MAKE E0O Perminan Uss: WAN MAS DH-1; MS-Approval 228.51, MNTU Category 3.1; Renault Trucks RLD-3; Volvo VDS-4	Rimula R5 E 10W40	APICI4, CH4, CG4, CF4; ACEA CF7, ES Es Global DH5, Es Global DH5, T7, T6, T2, T1, Marce ES 20078, T7, T6, T2, T1, Marce Ch4, Ech4+, MAN T2, T8, Me APICIA ZES, Renaul CT6, T6, T6, T6, T6, T6, T6, T6, T6, T6,	Rimula R4 15W40	API CL4, CG4, CF4, CF; ACEA CF; ES; Globall DHD-1, Cummins CCE 2007, 127, 76, 77, 78, Cat CF1-A, DDC 99K215, Mack ED M, ED-MAN 3225, MB Approval 228, Stanult Trucks RLD-2; Volvo VDS-3	Rimula R3 Turbo 15W40	API CH-4, CG-4, CF-4,CF- ACEA E2, Caterpilar ECF1-4; Commins CES 20076 57; Wark EO-M. EO-M+; MAN 27; MB- Approval 228.1; Volvo VDS
TOTAL	RUBIA TIR 9900 FE 5W30	ACEA E4/E6/F7E9, API (J.4/Cl-4/CH-4, MB-Approval 228.51; MAN M 327 / M 3677 / M 3277	Rubia TIR 8900 10W40	ACEA EGET/ES, API CJ.4/CI. A/CI-4, Cummins CES 20081; NECO TLS EP) Mack EDO. Premium Plus; MAN M 3477/M 3271-1; MacApproval 228.51; Renaulf TuGe 4.D-3; Wolvo	Rubia TIR 7400 10W40	ACEA E7, A3/83, A3/84, API CI- ACE4 A5 , Cummins CE5, 20078; MAN \$278, M 9228, 3/2231, Remail RLD2, Volov VDS-3, Mack E5-N	Rubia TIR 7400 15W40	ACEA E7, API CL-4/CH-4/SL, CATERPILLAR ECF-1-8; Cummins CES 2003; PICCO TE E7, Mack EO-N; MAN M 2275; MB- Approval 228.3; Renault Trucks RLD-2; Volvo VDS-3	Rubia TIR 6400 15W40	ACEA E3. API CH-4/S), CUMMINS CES 2007G, Mack EO-4/r, MaxN M2275; WB 2283, Renault RD/RD-2; Yolvo VDS-2
LUKOIL	Avantgarde Professional LE 5W30	ACEA Edife(F) FB; API CJ-d; Caterpliar FCF3 Cummins CE 20081: DDC 98C18; Dautz DQC (M-10 M-10 M-10 M-10 M-10 M-10 M-10 M-10	Avantgarde Professional LE 10W40	ACEA E4/E6/E7/E9, API G14, Caterpillar ECF-3. Cummins CES 20081; DDC 5987(3), Beutz DQC (14/10 LA; DSO DH-2; Modk E0-0 PP; MAN M 35/5/3477/2571-; MB Approval ZSS-1; MTU OII Category 2.1, 31; PSC "Antodizel" ("MZ); Renault VI RLD-3; Scania LA; VOLYO VDS-4	Avantgarde Ultra Plus 10W40	ACEA E7, API CL-4/SI, Caterpillar ECE-27/A; Curmmis SES 2007/E2007/220078; DEO, EDO, ECAM BIST, MACK MB ZBB.3: MTU Oil Category 2; Renault VIRLD2, RLD; VOUVO VDS-3; ZF-TE-ML 07D/05/K03A	Avantgarde Ultra 15W40	ACEA E7, API CLASSI, Caterpillar ECE2ATA Cummins CES 2007/620077/2007220071 Deutz DQCII-I1/0, Deutz DQCII-I1/0, Mark E0A, EOA PIDS SARA MAR ZASS, MAR ZASS, MITU Off GARGOY, Z RE-MAIL VI RDD, VOLVO VOS-3, Z-T-EAU, VDD-04400A; PISC** TILABAW MONC Plant*; PISC** Woodize** MONC Plant*; PISC** Woodize**	Avantgarde 15W40	ACEA E2, API CF-4/5G, KAMAZ. Euro-2
MOL	Dynamic Mistral 10W40	ACEA EGETYES, API CJ4JAPI SN; ASOD CALL AND CALL	Dynamic Mistral 10W40	ACEA EA/EG/E7/E9, API CI 4; Deuer DOCC III-101A, DOCC IV. 10LA; JASO DH-2; Made (EON); MAN M 5477, M 5271/MB 228.51; MT Upps 31; Renault. 2. RGD, RXD, Fare 300 VIDS-3; VOIVO VIDS-3;	Dynamic Transit 10W40	ACEA E7, API CI 4; Caterpillar FCEZ, DICO 5907(15), Deutz DCC III-10; Global DriD-1; Mack ED N, EO-M Pillar RID-2; Mika 228.3; Renauf RID-2; Moko VIOS-3; Tatra TDS 30/12	Dynamic Transit 15W40	ACEA E7 API CLASSI, Caterpillar ECF-2; Deutz DQC III-18; Global M E28:3; WAN M 3275-1; MIL- L-2:104E, WHO Type 2; Renault RLD-2; Volvo VDS-3; Tatra TDS	Turbo Diesel 15W40	API CF-4/CFK], ACEA E2, MAN 271, Yolivo VDS, Ava, Allison C- 4, ZETOR, MTU Type 1, Deutz DQC H02
ENI ENI	i-Sigma TOP MS 5W30	ACE EAFEVETE, API CK.4, CJ. 4; Catenpliar EGF-3; Cummins CGE 52081; T.5086; MSD DH-1 17; DH-2-17; DL-0-17; MSD MB 3371-1, MSD	i-Sigma TOP MS 10W40	ACE FEFE/FIGH API CK-4; Caterplian ECF-2, ECF-3; Cammins CES 20081: Destroit Diese 1987(B. Pourt DOC N-10-14, MSO DH-2-17) MAN MS-3271-11, MK-6TO OPP (MNN MS-327)-11, MK-6TO OPP (MNN MS-37)-14, MK-6TO OPP (MNN	i-Sigma Universal 10W40	ACEA E7, ACEA A3/B4, A PI C1-4, A Rison C-4, Cummins CES 200%, 2007, 2008; Defroit Diesel (314/21); Deeve Dogell (314/21); MTU type 22; Reseault VI RLD-2, Volvo VDS-3	i-Sigma performance E7 15W40	WCEA E7/E5/E3 ACEA B3, API CL 4. CH4/SL; Caterplian ECF-1a, ECF2; Deutz DOC III-10; MACK EO-N; MAN M 3275-1; MB Approval 228.3; MTU type 2, Renault VI RLD-2; Volvo VDS-3"	i-Sigma performance E3 15W40	ACEA E2, API CG-4/5L; MAN 271; MB 226.1, 229.1
HEXOL	Synline Ultratruck 5W30	ACEA E9, ACEA E7, ACEA E6, API (24S)A, CAFAN, MB 228.51, 228.31, MAN 3477, 3277, 3277, 1. Detrotic Deep ED CO 3937.82, Volvo VDS-4, NEG-11S.E9, CAT ECT-13, ECZ-2, ECF-3, Mack EO- P Deutz DOCK-11OLA MTU Type 31, Jaso DH-2, Cummins CES20081, Scanla Low Ash, DAF	HEXOL Synline UtraTruck 10W40	ACEA E9, ACEA E7, ACEA E6, API CLASAY, INALASSA 51, 22831, MANI 3477, 34	HEXOL Synline SuperTruck 10W40	API C-4/5L ACEA FC ACEA AGEA AGEA AGEA AGEA AGEA CONTOGRAPHICA BROWN TO AGE AGEA TO AGEA AGEA AGEA AGEA AGEA AGEA AGEA AGE	HEXOL Synline SuperTruck 15W40	API CL-4/SL, ACEA, EZ, ACEA, AZBG, WOON OYGS, Remault RLDS, RD, MAN BZZSS, DAF, MAN BZZSS, DAF, MACH ED, MING, ACET CL-1/L, AMA DCC 943CT, SMILL-1/DIE, JOHN DEVER GUZD, SLOWING ECH CONTROL STORM STORMS TREATMENTS CEASE ACTOR STORMS TREATMENT TO STORM GLOBEL DHELT, DEUTZ DQC IIII-10, ZELOT	HEXOL TurboDiesel 15W40	API CF/SF, ACEA A3/84, ACEA EZ; WW 500.00, 561.01, 505.00, MAI M2.201, Vilvow OVS, MAI Z71, Renault RN0700, Ford WS-M2, Flat 9,55535-D2, FSA B71
	Product	Specification	Product	Specification	Product	Specification	Product	Specification	Product	Spec.

HEXOL®SUBSTITUTION CHART FOR AGRICULTRUAL OEMS









JOHN DEERE COMBINES

ТҮРЕ	MAN. YEAR	APPLICATIONS	HEXOL LUBRICANT	
CWS series (1450, 1550)		Engine	HEXOL SuperTruck 15w40	
		Power unit	HEXOL Torsion 80w90	
	2001	Hydraulic system	HEXOL HV46	
	2001	Chains	HEXOL HV46	
		Grease lubricating places	HEXOL LIEP-2 Supreme	
		Cooling system	HEXOL G12 Alupro Antifreeze	
		Engine	HEXOL SuperTruck 15w40	
1100 series(1166, 1174, 1177, 1177 Hydro/4, 1188 Hydro/4) 2000 series(2054, 2056, 2058, 2064, 2066) and 2200 series(2256, 2264, 2266)		Manual gear box	HEXOL Torsion 80w90	
	1988 -	Hydraulic system	HEXOL HV46	
		Power unit	HEXOL Torsion 80w90	
		Chains	HEXOL HV46	
		Grease lubricating places	HEXOL LIEP-2 Supreme	
		Cooling system	HEXOL G12 Alupro Antifreeze	
	1992 - 1997 -	Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40	
		Manual gear box	HEXOL Torsion 80w90	
		Hydraulic system	HEXOL HV46 / HEXOL STOU 10w40	
		Power unit	HEXOL Torsion 80w90	
		Chains	HEXOL HV46	
		Grease lubricating places	HEXOL LIEP-2 Supreme	
		Cooling system	HEXOL G12 Alupro Antifreeze	
		Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40 / HEXOL STOU 10w40	
		Power unit	HEXOL Torsion 80w90	
9000 series(9000, 9540,		Hydrostatic system with hydrostatic drive	HEXOL STOU 10w40	
9560, 9580, 9640, 9660, 9680 WTS i CWS)	2000 -	Grease lubricating places	HEXOL LIEP-2 Supreme	
		Chains	HEXOL HV46	
		Hydraulic braking system	HEXOL DOT 4	
		Cooling system	HEXOL G12 Alupro Antifreeze	



JOHN DEERE TRACTORS

ТҮРЕ	MAN. YEAR	APPLICATIONS	HEXOL LUBRICANT		
series(6000, 6010, 6210		Engine	HEXOL SuperTruck 15w40		
		Transmission hydraulic system Power Quad 16/12	HEXOL UTTO 80w		
		Front differential with elastic suspension	HEXOL UTTO 80w		
	1986 -1997 1991 -	Front traction	HEXOL UTTO 80w		
		Front axle	HEXOL UTTO 80w		
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife		
		Cooling system	HEXOL G12 Alupro Antifreeze		
6020 series(6020, 6120, 6220, 6320, 6420, 6520, 6620, 6820) 6030 series(6530, 6630, 6830, 6930))		Engine	HEXOL SuperTruck 15w40		
		Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30 / HEXOL STOU 10w40		
	2002 - 2005	Front differential with elastic suspension	HEXOL UTTO 80w		
		Front traction	HEXOL UTTO 80w		
		Front axle	HEXOL UTTO 80w		
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife		
		Cooling system	HEXOL G12 Alupro Antifreeze		
		Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40		
	2006 -	Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30		
		Front differential with elastic suspension	HEXOL UTTO 80w		
		Front traction	HEXOL UTTO 80w		
		Front axle	HEXOL UTTO 80w		
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife		
		Cooling system	HEXOL G12 Alupro Antifreeze		
		Engine	HEXOL SuperTruck 15w40		
		Gear box - hydraulic system	HEXOL STOU 10w30		
7000 series (7600, 7700,	1992 - 1996	Front axle	HEXOL Torsion 80w90		
7800)	1992 - 1990	Front differential	HEXOL Torsion 80w90		
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife		
		Cooling system	HEXOL G12 Alupro Antifreeze		



JOHN DEERE TRACTORS

ТҮРЕ	MAN. YEAR	APPLICATIONS	HEXOL LUBRICANT
7010 series(7610, 7710, 7810)		Engine	HEXOL SuperTruck 15w40
		Gear box - hydraulic system	HEXOL STOU 10w30
		Front axle	HEXOL STOU 10w30
	1996 -	Front differential	HEXOL STOU 10w30
		Front traction	HEXOL STOU 10w30
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
		Cooling system	HEXOL G12 Alupro Antifreeze
		Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40
		Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30
		Front differential	HEXOL STOU 10w30
7020 series(7720, 7820, 7920)	2003 -	Front traction	HEXOL STOU 10w30
7030 series(7130, 7230, 7430*, 7530*)		Front axle	HEXOL STOU 10w30
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
		Cooling system	HEXOL G12 Alupro Antifreeze
		Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40
	2008 -	Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30
		Front differential	HEXOL STOU 10w30
		Front traction	HEXOL STOU 10w30
		Front axle	HEXOL STOU 10w30
		Rear axle housing*	HEXOL Torsion 80w90
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
		Cooling system	HEXOL G12 Alupro Antifreeze
		Engine	HEXOL SuperTruck 15w40
		Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30
		Front axle	HEXOL STOU 10w30
7030 series(7630, 7730,	2007 -	Front differential	HEXOL STOU 10w30
7830, 7930)	2007 -	Front traction	HEXOL STOU 10w30
		Rear axle housing	HEXOL STOU 10w30
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Lnglife
		Cooling system	HEXOL G12 Alupro Antifreeze



JOHN DEERE TRACTORS

ТҮРЕ	MAN. YEAR	APPLICATIONS	HEXOL LUBRICANT
8020 series(8120, 8220, 8320, 8420, 8520)	2002 -	Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40
		Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30
		Front axle	HEXOL UTTO 80w
		Front differential	HEXOL UTTO 80w
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
		Cooling system	HEXOL G12 Alupro Antifreeze
8030 series (8130, 8230, 8330, 8430, 8530)	2007 - 2009	Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40
		Gear box - hydraulic system	HEXOL UTTO 80w / HEXOL STOU 10w30
		Front axle	HEXOL Torsion 80w90
		Front differential	HEXOL Torsion 80w90
		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
		Cooling system	HEXOL G12 Alupro Antifreeze





JOHN DEERE LOADERS AND SILOS

	ТҮРЕ	MAN. YEAR	APPLICATIONS	HEXOL LUBRICANT
Telescopic arm loaders	3200, 3400	1999 -	Engine	HEXOL SuperTruck 15w40 / HEXOL Synline SuperTruck 10w40
			Manual gearbox- hydraulic system	HEXOL UTTO 80w
	3200, 3400		Grease lubricating places	HEXOL LiEP-2 Supreme / HEXOL LiEP-2 Blue Longlife
			Cooling system	HEXOL G12 Alupro Antifreeze
6610, 6710, 6			Engine	HEXOL SuperTruck 15w40
			Hydrostatic system with hydrostatic drive	HEXOL HV46
			Transmission, Manual gearbox	HEXOL Torsion 80w90
	6610, 6710, 6810, 6910		Chain transmission	
			Chain lubrication	HEXOL HV46
			Grease lubricating places	-
			Cooling system	HEXOL G12 Alupro Antifreeze
Silon		-	Engine	HEXOL SuperTruck 15w40
			Hydrostatic system with hydrostatic drive	HEXOL UTTO 80w
	6650 6750 6850 6050		Transmission, Manual gearbox	HEXOL Torsion 80w90
	6650, 6750, 6850, 6950		Chain lubrication	HEXOL HV46
			Grease lubricating places	-
			Cooling system	HEXOL G12 Alupro Antifreeze
		-	Engine	HEXOL SuperTruck 15w40
			Hydrostatic system with hydrostatic drive	HEXOL ATF Dexron II
			Manual gearbox	HEXOL Torsion 85w140 / HEXOL Torsion 80w90
	E720 E720 E020 E020		Chain transmission	
	5720, 5730, 5820, 5830		Chain lubrication	HEXOL HV46
			Hubs	HEXOL Torsion 85w140 / HEXOL Torsion 80w90
			Grease lubricating places	
			Cooling system	HEXOL G12 Alupro Antifreeze









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