

DOOSAN GENUINE OIL

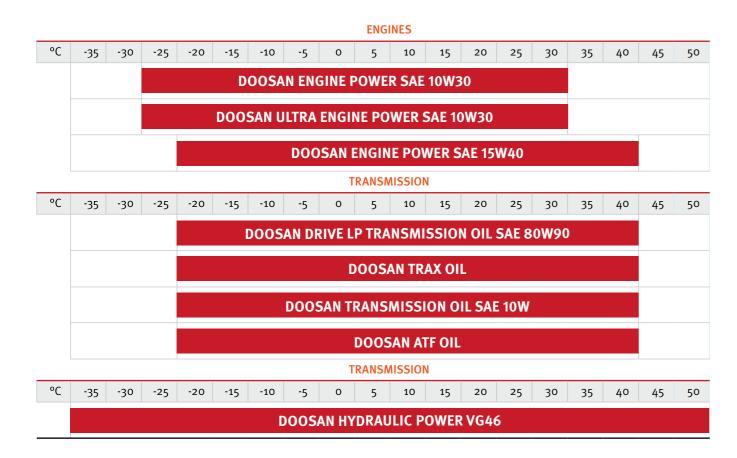


Doosan Branded Products

- Increase of DOOSAN familiarity
- Customer preference
- Consistent and reliable quality
- Increase of return on investment
- Platform of growth for other opportunities

Doosan Oils & Lubricants

- Co-developed by Doosan forklit engineers for Doosan forklifts
- Better dispersion to work with higher level of soots
- Better detergency to minimise deposit formaton
- Suitable for very low (10ppm) and very high (50ppm) sulphur content fuels
- Superior protection against corrosion caused by the acidic by-products of the . combustion process
- Improved protection against the higher operating temperature



Engine Oils

Designed and recommended for all Doosan equipment. 'Classic' new generation high performance Diesel lubricants. Excellent soot control and oxidation resistance. Satisfies the highest European (ACEA) and American (API) specifications.

Doosan Engine Power SAE 10W30 - North Continental

Main characteristics

- Synthetic base
- Provides superior lubrication at low temperature startups (-25°C)
- Optimal protection for all engines which are not equipped with emission reduction systems (e.g. DPF)
- All-season protection
- Low evaporability, meaning less refilling required
- Suitable for petrol engines
- Excellent dispersion, minimizing the formation of sludge and deposits

Doosan Engine Power SAE 15W40 - South Continental

Main characteristics

- All-season protection
- Low evaporability, meaning less refilling required Optimal protection for all engines which are not
- equipped with emission reduction systems (e.g. DPF)
- Suitable for petrol engines
- Excellent dispersion, minimizing the formation of sludge and deposits

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International Standards

- ACEA E7
- API CI-4

OEM Standards

- Mercedes Benz 228.3
- Cummins 20071/-72/-76/-77/-78
- MAN M3275
- MTU TYPE II
- ALLISON C-4

International Standards

- ACEA E7
- API CI-4

OEM Standards

- Mercedes Benz 228.3
- Cummins 20071/-72/-76/-77/-78
- MAN M3275
- MACK EO-M & EO-M PLUS
- Volvo VDS-3
- MTU TYPE II
- ALLISON C-4

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Doosan Ultra Engine Power SAE 10W30

Doosan Ultra Engine Power uses the latest additive technology to protect modern low-emission heavy-duty engines under the most severe engine conditions. The oils are designed to provide optimal protection that adapts to the driving conditions resulting in improved soot handling, wear protection and resistance to breakdown under high temperature. The low-ash formulation is necessary to protect the exhaust catalyst and particle filters as used on the latest low-emission vehicles (Tier III, Tier IIIb and TIER IV).

Main characteristics

- Lower SAPS (Sulphated Ash, Phosphorus and • Sulphur) oil
- Synthetic base
- Provides superior lubrication at low temperature startups (-25°C)
- All-season protection
- Optimal protection for all engines
- Low evaporability, meaning less refilling required •
- Suitable for petrol engines
- Excellent dispersion, minimizing the formation of • sludge and deposits
- Certified enhanced lifetime of the emission control systems (e.g. DPF)

International Standards

- ACEA E9/E7
- API CJ-4

OEM Standards

- CAT ECF-3/-2/-1a
- DETROIT DIESEL 93K218 •
- ACK EO-O PREMIUM PLUS
- MAN 3575
- Mercedes Benz 228.31 Renault RVI RLD-3

Engine Oils

Lubricant especially developed for transmissions, wet brakes and final drives of off-road equipment.

Doosan Transmission Oil SAE 10W

Main characteristics

- Reduced gear wear
- Improved friction control •
- Longer life for transmissions and brakes •
- Less brake noise and increased rim pull •
- Excellent control of oxidation and sludge provide • longer drain intervals
- Excellent shear stability
- Maximum foam protection

Doosan Trax Oil

Main characteristics

- UTTO (Universal Tractor Transmission Oil)
- Recommended for axles with wet brakes, limited slip differentials and gearboxes
- Superior anti-noise, anti-stick and anti-slip properties
- Special friction modifiers combined with a balanced and precise blend of other components
- Suitable for a wide range of friction disc materials •
- Longer maintenance intervals •
- High thermal resistance

Perfomance Level

- ZF TE-ML 03C
- ZF TE-ML 07F

Perfomance Level

- API GL-4 low speed/high torque
- ZF TE-ML 03E/05F/17E/21F
- Allison C-4
- Caterpillar TO-2
- Ford New Holland ESEN M₂C86C
- Ford New Holland M2C86A/-B/M2C41B/M2C48B/ M2C53A/M2C134A/-B/-C
- Massey Ferguson M1110/M1127/M1129A/M1135/ M1141
- John Deere J2oC •
- Case International MS1204/MS1205/MS1206/
- MS1207/MS1210 DENISON HF-0/-1/-2

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Tranmission & Axle Oils

Axle fluids with or without hypoid gears with specific features of EP (Extreme Pressure). Specially formulated for normal and self-locking differentials with limited slip systems.

Doosan Drive LS (Limited Slip) Transmission Oil SAE 80W90

Main characteristics

- Characteristics of EP
- Gear protection formulation
- Anti-foam properties
- High Limited Slip properties

Perfomance Level

- API GL-5
- ZFTE-ML 05C/12C/21C
- GTG LLP-008
 MIL-L-2105D
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Doosan ATF (Automatic Transmission Fluid) Oil

Fully synthetic lubricating oil for hydraulic automatic transmissions and power steering of cars and other equipment. Ideal in harsh climates.

Main characteristics

- Red colour
- Particular ATF additives ensure extreme fluidity in cold starting conditions.
- Optimal detergent characteristics guarantee an excellent cleanliness of mechanical parts.
- Excellent heat removal properties in transmission components.
- Fully synthetic formulation to ensure excellent thermal-oxidative resistance and hence prolonged oil drain intervals.

Perfomance Level

- Allison C4 Performance
- Dexron III
- Fiat 9.55550-AG2 Contractual Technical Ref. N°F001. C94
- Ford Mercon (M-011201)
- Iveco 18-1807 Classe AG3/III, Contractual Technical Ref. Nºloo1.Co6
- MAN 339 Type Z1 and V1 Performance
- MAN 339 Type Z2 and V2 Performance
- Voith 55.6335.32
- ZF TE-ML 04D, 09, 14A, 17C

Hydraulic Oils

Designed and recommended for all Doosan equipment. High performance synthetic based lubricants for hydraulic/hydrostatic systems.

Doosan Hydraulic Power VG46

Main characteristics

- High filterability: significant reduction of filter plugging issues
- Synthetic base
- Maintains superior performance under extreme operating conditions
- Excellent thermal stability down to -35°C
- Very low deposit formation
- Excellent startups at low temperature
- Very high ant-wear properties
- Keeps the system clean
- Excellent water separability
- Viscosity at grade 46 to provide maximum efficiency during startup

Perfomance Level

• DIN 51524 Part 3 HVLP

Grease

Doosan MP (Multi-Purpose) Grease EP2

Main characteristics

- Green colour
- High performance lithium grease
- Formulated wih high quality base oils and anti-wear • additives
- Excellent rust and corrosion protection for • prolonged equipment life
- Designed for routine and moderately loaded • applications
- Formulated protection in wet conditions and under moderate shock loads
- Excellent protection of lubricated equipment with potential for extended life and reduced maintenance
- Outstanding high temperature performance •
- Drop point at 260°

Coolant

Doosan EG (Ethylene Glycol) Coolant

Main characteristics

- Pre-mixed with deionised water and ready-to-use
- Freezing protection down to -36°C
- Free of silicate, borate, amine, nitrate and phosphate
- High durability and high protection

Product Reference Overview

		20 LITER	210 LITER	1000 LITER
			0054	
	Doosan Engine Oil 10W30	941-00900B	941-00901C	941-00902D
Doosan Engine Oil	Doosan Engine Oil 15W40	941-00904B	941-00905C	941-00906D
	Doosan Ultra Engine Oil 10W30	941-00907B	941-00908C	941-00909D
	Doosan Transmission Oil SAE 10W	941-00502B	941-00503C	on demand
Doosan Transmission	Doosan Trax Oil	941-00700B	941-00701C	on demand
& Axle Oil	Doosan Drive LS Transmission Oil SAE 80W90	941-00504B	941-00501C	on demand
	Doosan ATF Oil	941-00400B	941-00401C	on demand
Doosan Hydraulic Oil	Doosan Hydraulic Power VG46	941-00800B	941-00801C	941-00802D
Doosan Coolant	Doosan Coolant	941-00599B	941-00600C	941-00601D
		400 GRAM	18 KILOGRAM	50 KILOGRAM
		MULTI-F		

Doosan Grease	Doosan MP Grease EP2	941-00656	941-00655	941-00657

Bulk quantities and prices are available on demand.

The delivery of oils and lubricants can be subjected to restrictions and/or regulations in certain countries. Please refer to your contact person for more information.

Lubrication Chart

		DOOSAN ENGINE OIL 10W30	DOOSAN ENGINE OIL 15W40	DOOSAN ULTRA ENGINE OIL 10W30	DOOSAN HYDRAULIC POWER VG46	DOOSAN TRAX OIL	DOOSAN TRANSMISSION OIL 10W	DOOSAN DRIVE LS TO OIL 8oW90	DOOSAN ATF OIL
	E/G CRANKCASE (DIESEL) A2300 (Cummins 2.3L) EURO II								
	E/G CRANKCASE (DIESEL) V2403 (Kubota 2.4L) EURO III								
D15/18S-5, D20SC-5	E/G CRANKCASE (LPG) G420F(E) (HMC 2.0L)								
	E/G CRANKCASE (LPG) G424I(E) (HMC 2.4L)								
G15/18S-5, G20SC-5,	HYDRAULIC & POWER STEERING SYSTEM								
GC15/18S-5, GC20SC-5	TRANSMISSION								
-	DRIVE AXLE (Shoe Brake)								
	DRIVE AXLE (OCDB)								
	E/G CRANKCASE (DIESEL) B3.3 (Cummins 3.3L) EURO II								
	E/G CRANKCASE (DIESEL) 4TNE94L (Yanmar 3.oL) EURO IIIA								
D20/25/30G G20/25/30G	E/G CRANKCASE (LPG) G424F(E) (GM 2.4L)								
620/25/306	HYDRAULIC & POWER STEERING SYSTEM								
	TRANSMISSION								
	DRIVE AXLE (Shoe Brake)								
	E/G CRANKCASE (DIESEL) B3.3 (Cummins 3.3L) EURO II								
	E/G CRANKCASE (DIESEL) 4TNE98 (Yanmar 3.3L) EURO III								
	E/G CRANKCASE (DIESEL) 4TNV98 (Yanmar 3.3L) EURO III								
D20/25/30/33S-5, D35C-5	E/G CRANKCASE (DIESEL) 4TNE94L (Yanmar 3.0L) EURO IIIA								
G20/25/30E-5	E/G CRANKCASE (LPG) G420F(E) (HMC 2.0L)								
G20/25/30/33P-5, G35C-5	E/G CRANKCASE (LPG) G424F(E) (GM 2.4L)								
GC20/25/30/33E-5 GC20/25/30/33P-5	E/G CRANKCASE (LPG) G424I(E) (HMC 2.4L)								
6C20/25/30/33F-5	E/G CRANKCASE (LPG) G424P(E) (MMC 2.4L)								
	HYDRAULIC & POWER STEERING SYSTEM								
	TRANSMISSION								
	DRIVE AXLE								
	E/G CRANKCASE (DIESEL) D24-LEFoo (G2 2.4L) EURO IIIB								
D20/25/30/33S-7 D35C-7	HYDRAULIC & POWER STEERING SYSTEM								
020/25/50/553/0556/	TRANSMISSION								
	DRIVE AXLE								
	E/G CRANKCASE (DIESEL) DB58S (DI 5.8L) EURO II								
	E/G CRANKCASE (DIESEL) D439E (HMC 3.9L) EURO III								
	E/G CRANKCASE (DIESEL) V3800CR (Kubota 3.8L) EURO IIIB								
D35/40/45S-5, D50/55C-5	E/G CRANKCASE (LPG) G643(E) (GM 4.3L)								
D40/45/50/55SC-5	HYDRAULIC & POWER STEERING SYSTEM								
	TRANSMISSION								
	DRIVE AXLE (Shoe Brake)								
	DRIVE AXLE (OCDB)								

	E/G CRANKCASE (DIESEL) D34-LEF04 (G2 3.4L) EURO I
D35/40/45S-7,	HYDRAULIC & POWER STEERING SYSTEM
D50/55C-7	TRANSMISSION
D40/45/50/55SC-7	DRIVE AXLE (Shoe Brake)
	DRIVE AXLE (OCDB)
	E/G CRANKCASE (DIESEL) DB58S (DI 5.8L) EURO II
	E/G CRANKCASE (DIESEL) D439E (HMC 3.9L) EURO III
Drolfolzoloos r	E/G CRANKCASE (DIESEL) V3800CR (Kubota 3.8L) EUR IIIB
D50/60/70/80/90S-5 (3 Speed)	E/G CRANKCASE (LPG) G643(E) (GM 4.3L)
D50/60/70S-5	HYDRAULIC & POWER STEERING SYSTEM
(2 Speed)	TRANSMISSION (2 Speed)
G50/60/70S-5	TRANSMISSION (3 Speed, ZF 3WG116)
	TRANSMISSION (3Speed, ZF 3WG94)
	DRIVE AXLE (Shoe Brake)
	DRIVE AXLE (OCDB)
	E/G CRANKCASE (DIESEL) D34-00000 (G2 3.4L) EURO
	E/G CRANKCASE (DIESEL)
D50/60/70/80/90S-7	HYDRAULIC & POWER STEERING SYSTEM
(3 Speed)	TRANSMISSION
	DRIVE AXLE (Shoe Brake)
	DRIVE AXLE (OCDB)
	E/G CRANKCASE (DIESEL) DLo6 (DI 6.oL) EURO III
	E/G CRANKCASE (DIESEL) DLo6 (DI 6.oL) EURO IIIB
	HYDRAULIC & POWER STEERING SYSTEM
D110/130/160S-5	TRANSMISSION
	DRIVE AXLE (SHOE)
	DRIVE AXLE (OCDB)
	BRAKE Cooling (OCDB)
	E/G CRANKCASE (DIESEL) DLo6 (DI 6.oL) EURO IV
D100/120/140/160S-7	HYDRAULIC & POWER STEERING SYSTEM
0100/120/140/1003-7	TRANSMISSION
	DRIVE AXLE (OCDB)



B10/13/15/16R-5

		DOOSAN ENGINE OIL 10W30	DOOSAN ENGINE OIL 15W40	DOOSAN ULTRA ENGINE OIL 10W30	DOOSAN HYDRAULIC POWER VG46	DOOSAN TRAX OIL	DOOSAN TRANSMISSION OIL 10W	DOOSAN DRIVE LS TO OIL 80W90	DOOSAN ATFOIL
B15/18S-5	HYDRAULIC & POWER STEERING SYSTEM								
BC15/18S-5 BC20SC-5	DRIVE AXLE (OCDB)								
B15/18/20T-5	HYDRAULIC & POWER STEERING SYSTEM								
B16/18/20X-5	DRIVE AXLE (OCDB)								
Declar loc loc Y -	HYDRAULIC & POWER STEERING SYSTEM								
B22/25/30/35X-5	DRIVE AXLE (OCDB)								
B40/45/50X-5	HYDRAULIC & POWER STEERING SYSTEM DRIVE AXLE (OCDB)								
B20/25/30/32S-5	HYDRAULIC & POWER STEERING SYSTEM								
BC20/25/30/32S-5 BC25SE-5	DRIVE AXLE (OCDB)								
BR10/13/15/18J	HYDRAULIC & POWER STEERING SYSTEM								
BR14/16JW	TRANSFER & EPS ACTUATOR								
PD40/45/491 5	HYDRAULIC & POWER STEERING SYSTEM								
BR13/15/18J-5	TRANSFER								

HYDRAULIC & POWER STEERING SYSTEM

DIVE AXLE (REAR) FRONT AXLE

B15/18/20T-7	HYDRAULIC & POWER STEERING SYSTEM
B18/20TL-7	DRIVE AXLE (OCDB)
D.C.L.O.L. a.Y	HYDRAULIC & POWER STEERING SYSTEM
B16/18/20X-7	DRIVE AXLE (OCDB)
Destadasta	HYDRAULIC & POWER STEERING SYSTEM
B22/25/30/35X-7	DRIVE AXLE (OCDB)
Professor -	HYDRAULIC & POWER STEERING SYSTEM
B40/45/50X-7	DRIVE AXLE (OCDB)
B20/25/30/32S-7	HYDRAULIC & POWER STEERING SYSTEM
BC20/25/30/32S-7 BC25S-7	DRIVE AXLE (OCDB)
PDro las la 95 -	HYDRAULIC & POWER STEERING SYSTEM
BR13/15/18S-7	TRANSFER & EPS ACTUATOR
BR13/15/18S-7 (PLUS)	HYDRAULIC & POWER STEERING SYSTEM
	TRANSFER & EPS ACTUATOR
PDro las lass o	HYDRAULIC & POWER STEERING SYSTEM
BR13/15/18S-9	TRANSFER & EPS ACTUATOR
	HYDRAULIC & POWER STEERING SYSTEM
BR13/15/18S-7 (PLUS)	TRANSFER & EPS ACTUATOR
	HYDRAULIC & POWER STEERING SYSTEM
BR18/20SP-7	TRANSFER
BR20/25S-7	HYDRAULIC & POWER STEERING SYSTEM
DR20/253-7	TRANSFER
	HYDRAULIC & POWER STEERING SYSTEM
BR20/25S-7 (PLUS)	TRANSFER
PPag/ass a	HYDRAULIC & POWER STEERING SYSTEM
BR20/25S-9	TRANSFER
	HYDRAULIC & POWER STEERING SYSTEM
B10/13/15/16R-7	DIVE AXLE (REAR)
_	FRONT AXLE

DOOSAN ENGINE OIL 10W30	DOOSAN ENGINE OIL 15W40	DOOSAN ULTRA ENGINE OIL 10W30	DOOSAN HYDRAULIC POWER VG46	DOOSAN TRAX OIL	DOOSAN TRANSMISSION OIL 10W	DOOSAN DRIVE LS TO OIL 8oW9o	DOOSAN ATFOIL

Accessories

Oil Analysis Kit

Introduction

Fluids and lubricants during their lifetime accumulate wear metals, contaminants and other substances. An oil analysis is a preventive maintenance tool based on monitoring the condition of the components through the analysis of the oil during operation. The test evaluates the proper working of the lubricated parts and identifies problems such as contamination by fuel, coolant, etc. It also evaluates the oil degradation. The analysis is performed by an independent, experienced laboratory, with high-tech equipment to guarantee a state of the art analysis and quality report. Introduction

With a simple analysis of a lubricant, it is possible to

- know the exact state of the mechanical parts (engines, gears, differentials, etc.)
- recommend preventive maintenance work
- increase the life of lubricated parts
- prevent possible damage and/or excessive wear
- optimize the frequency of oil drain interval
- lower costs of downtime due to maintenance
- ensure greater effectiveness and efficiency of the lubricated parts and/or equipment
- achieve remarkable cost savings

An effective Analysis Kit equipped with a sucton tube and bottle, to fully simplify sampling, without any spilling and/or getting dirty. The Analysis Kit consists of:

- 10 sample bottles
- 5mt PTFE tube
- 10 sample data labels
- 10 transparent resealable plastic bags
- 10 plastic envelopes



PART NUMBER

ITEM DESCRIPTION

Oil Analysis Kit	6987799D
Pump	6987800D

Drum Trolley

Heavy duty trolley consisting of a zinc-coated tubular structure for moving drums.

Waste Oil Tank

Container for collection and storage of waste oils, manufactured in compliance with the applicable regulations. Made of high-density polyethylene, offering high mechanical and thermal resistance, as well as resistance to UV rays and atmospheric agents.

Containment tanks

Containment tanks made of powder coated steel with a zinc-coated grate. Manufactured according to the latest regulations for storage of fluids.

Manual Action Pump For Drums (0.5 litre/stroke)

Manual action pump for transfer of oil, coolant and diesel fuel from drums. Easy to install, simple to operate, dependable and efficient.

Manual Action Pump For Drums - with flowmeter (0.2 litre/stroke)

Manual action pump for transfer of oil, coolant and diesel fuel from drums. Easy to install, simple to operate, dependable and efficient.

Oil Transfer Kit

Air-operated oil kit suitable for sucking oil directly from drums and tanks. The use of highest quality materials and accurate assembly guarantee reliability and durability.

Many more available !









- Production Subsidiary
- Sales Subsidiary
- A Parts Depot Center



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