



lubricants for agricultural and work machinery



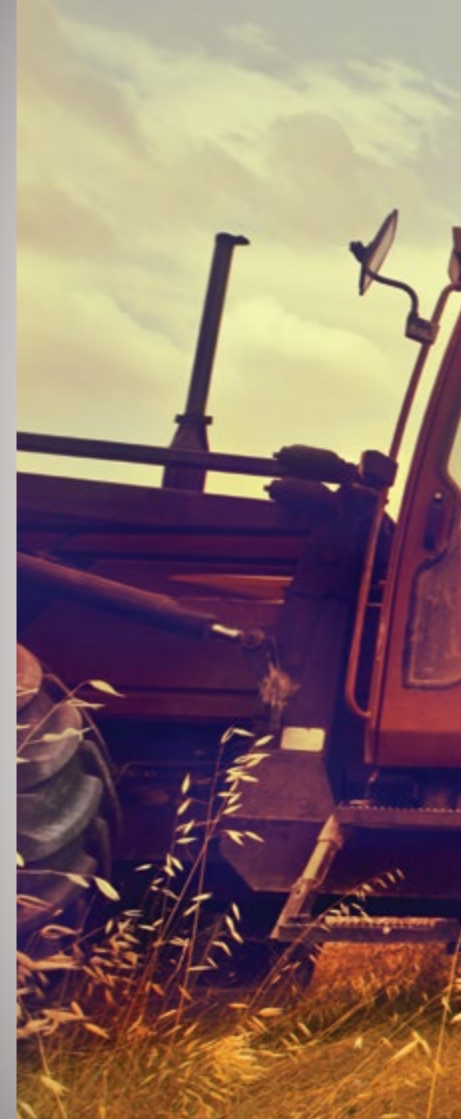
eni

eni.com

eni has developed a complete line of lubricants for agricultural machinery, on land vehicles, work vehicles and equipment meeting the highest performance standards. **eni** lubricant lines include traditional technology products employing reliable, tried-and-tested formulations, as well as cutting edge technologies suitable for modern vehicles fitted with emission reducing exhaust gas post-treatment systems.

A line of lubricants has been specifically designed to provide better fuel economy, topnotch performance in any weather condition, eco-friendliness and long-lasting performance.

eni offers a series of specialized products as multifunctional oils, coolants, hydraulic fluids and greases to meet the needs of the majority of agricultural and work machinery.



engine oils

High technology product line designed to meet all off-highway vehicles' needs, complying with the most stringent performance specifications set by leading manufacturers. The line also includes lubricants specifically designed for new generation EURO V engines fitted with exhaust gas after-treatment systems that require a special additive formulation to maintain their effectiveness.



eni i-Sigma Performance E4 10W-40

- Synthetic technology oil ideal for machineries operating under high loads.
- Maximum protection of engine components from wear and deposits.
- Suitable for extended oil drain intervals.

SPECIFICATIONS

ACEA E4
MB-Approval 228.5
MAN M3277
MTU Type 3

eni i-Sigma Performance E7 15W-40

- High performance lubricant for a wide range of engine types.
- Allows extended drain oil intervals.
- Maximum protection of engine components from wear and deposits.

SPECIFICATIONS

API CI-4/CH-4/SL
ACEA E7, E5, E3, B3
MB-Approval 228.3
MAN M3275-1
MTU Type 2
Volvo VDS-3
Deutz DQC III-10
CAT ECF-1a

eni i-Sigma Top 5W-30

- Top synthetic lubricant ideal for extremely severe working conditions.
- Excellent fuel-saving characteristics and cold start qualities.
- Ideal for very extended oil drain intervals.

SPECIFICATIONS

API CI-4 ACEA E4, E7
MB-Approval 228.5
MAN M3277
MAN M3377
MTU Type 3
Volvo VDS-3
Mack EO-M Plus
Deutz DQC IV-10
CAT ECF-2
Renault RXD, RLD-2, RLD

eni i-Sigma Top 10W-40

- Synthetic technology lubricant ideal for engines operating in extremely severe working conditions.
- Allows maximum oil drain intervals.
- Excellent wear resistance and piston cleaning properties.

SPECIFICATIONS

API CF ACEA E4, E7
MB-Approval 228.5
MAN M3277
MAN M3377
MTU Type 3
Volvo VDS-3
Deutz DQC III-10
Renault RXD
Scania LDF-3
Cummins CES20072
Voith Class A ZF 04C DAF
extended drain

eni i-Sigma Top MS 5W-30

- Top synthetic oil suitable for Euro V and previous version engines.
- Fuel saving properties and excellent cold start qualities.
- Outstanding detergent and protection properties.

SPECIFICATIONS

API CJ-4/SN
ACEA E6, E7, E9
MB-Approval 228.51, MB 228.31
MAN M3477, M3677, M3271-1
MTU Type 3.1
Volvo VDS-4
Mack EO-M plus, EO-N, EO-O PP
Deutz DQC IV-10LA JASO DH-2
CAT ECF-3
Renault RXD, RLD-3, RLD-2, RGD

eni i-Sigma Top MS 15W-40

- High performance oil for Euro III to Euro V engines.
- Suitable in extremely severe working conditions.
- Capable of extended oil drain intervals.

SPECIFICATIONS

JAPI CJ-4/SM ACEA E9
MB-Approval 228.31
MAN M3575
MTU Type 2.1
Volvo VDS-4
Mack EO-O PP
Deutz DQC III-10 LA
CAT ECF-1a, ECF-2, ECF-3
Renault RLD-3
Cummins CES 20081
Detroit Diesel 93K218

transmission oils

Innovative product line suitable for use in classic transmissions as well as in most modern driveline systems. The line complies with a wide range of performance specifications issued by the leading international organizations and required by most tractors and work machineries operating today.



eni Rotra HY 80W-90

- Extreme pressure oil for hypoid gears, typical use in final drives and power take-off.
- Antiwear and anticorrosion properties.
- High protection from rust and foaming.

SPECIFICATIONS

API GL-4
MIL-L-2105 level
MAN 341 Typ E1, Z2
ZF TE-ML 2B, 16A, 17A, 19A
VW TL 726 (level)
Liebherr Cranes
MB 235.1 level

eni Rotra MP 80W-90

- Extreme pressure oil for severely loaded hypoid gears, typical use in final drives and power take-off.
- It protects from corrosion and wear, keeping all lubricated components in perfect conditions.

SPECIFICATIONS

API GL-5
MIL-L-2105D
FORD M2C 105A
FORD M2C-154A
FORD SQM-2C-9002A/9008A/9101A
CHRYSLER MS-5644
GM MS 9985290
MAN 342 Typ M1
OPEL B 0401010
VW TL 727/726
VOLVO 97310/97313/97314
ZF TE-ML 16B, 17B, 19B, 21A
Liebherr Cranes

eni Rotra MP/S 85W-90

- Extreme pressure oil specifically dedicated to applications where antistick-slip properties are required.
- Particularly suitable for lubrication of oil wet brakes and limited-slip differentials.

SPECIFICATIONS

API GL-5
FORD M2C-154A
FORD M2C-105A
MIL-L-2105D
ZF TE-ML 05C, 12C, 16E, 21C

eni Rotra MP/DB 85W-90

- Extreme pressure oil for lubrication of Daimler Chrysler transmissions. Excellent anti-wear and oxidation stability properties.

SPECIFICATIONS

API GL-5
MAN 342 Typ M1
MB 235.0
MIL-L-2105D
ZF TE-ML 16C, 17B, 19B, 21A
VW TL 727
Liebherr Cranes

eni Rotra MP/DB Synth 75W-90

- Fully synthetic high performance oil for lubrication of Daimler Chrysler transmissions.
- Outstanding anti-wear and oxidation stability properties.
- Maximum protection of gears for best performances and long life use.

SPECIFICATIONS

API GL-5
MB 235.8
MAN 342 Typ S1

eni Rotra LSX 75W-90

- Fully synthetic high performance transmission oil for universal use.
- It provides long term protection of gears and is suitable for extended oil drain intervals.
- Outstanding oxidation stability and antiwear properties.

SPECIFICATIONS

API GL4, GL5, MT-1
MAN 341 Typ E3, Z2
MAN 342 Typ M3
MIL-PRF-2105 E
MB 235.8 level
MACK GO-J
SAE J 2360
SCANIA STO 1:0
ZF TE-ML 02B, 05B, 07A, 08, 12B, 16F, 17B, 19C, 21B
Eaton Europe
Meritor 076-N

eni Rotra Truckgear 80W-90 - 85W-140

- Special oils suitable for use in gearboxes and axles of work machineries.
- They provide excellent thermal and oxidation stability for maximum protection even under severe load and temperature conditions.

SPECIFICATIONS 80W-90

API GL4, GL5, MT-1,
PG-2 MIL-PRF-2105E
SAE J 2360 MB 235.0 level
SCANIA STO 1:0
ZF TE-ML 2B, 5A, 7A, 12E, 16B, 17B, 19B, 21A
Liebherr Cranes
MAN 341 Typ E2, Z2
MAN 342 Typ
M2 NATO O-226

SPECIFICATIONS 85W-140

API GL4, GL5, MT-1
SAE J 2360
MIL-L-2105D
MIL-PRF-2105E
SCANIA STO 1:0
ZF TE-ML 5A, 7A, 12E, 16D, 21A
Liebherr Cranes



multifunctional oils

Multi-purpose products designed for lubrication of a wide range of devices fitted on modern tractors and work machineries. They are generally grouped into two categories:

U.T.T.O. (Universal Tractor Transmission Oil): Lubricants potentially suitable for use in all auxiliary equipments, engine excluded.

S.T.O.U. (Super Tractor Oil Universal): Lubricants potentially suitable for use into the engine and in all the auxiliary equipments fitted.



UTTO multifunctional oils

eni Multitech JD/F 10W-30

- UTTO lubricant for lubrication of transmission and hydraulics combined systems.
- Low cold viscosity for ensuring easy start even in rigid climates.
- Suited also for lubrication of wet brakes axles.

SPECIFICATIONS

API GL-4
CAT TO-2
ALLISON C-4
JOHN DEERE JDM J 20C
MASSEY FERGUSON M1135, M1141, M1143, 1145
KUBOTA UDT FLUID
KOMATSU (KES 07.866)
CASE New Holland MAT 3525
CASE MS 1207, 1210
FORD ESN-M2C86-B
FORD ESN-M2C86-C
FORD ESN-M2C134-D
FNHA-2C-201
VCE-WB 101
ZF TE-ML 03E, 06K, 17E level

eni Multitech THT 15W-30

- UTTO lubricant for lubrication of transmission and hydraulics combined systems.
- It contains high quality antiwear additives for better protection and correct systems operating.
- Suited also for lubrication of wet brakes axles.

SPECIFICATIONS

API GL-4
FORD ESEN M2C-86B
FORD ESEN M2C-134 B/C/D
J.I. CASE MS 1205-1206-1207 1209
MASSEY FERGUSON M 1135-1141- 1143-1145
ALLISON C-4
CAT TO-2
New Holland FNHA-2C-201.00
ZF TE-ML 03E, 05F, 06K, 17E, 21F
CARRARO trasmissioni

eni Multitech THT/C 20W-30

- UTTO lubricant suitable for lubrication of transmission and hydraulics combined systems.
- Excellent gear protection and antifoam properties.
- Suited also for lubrication of wet brakes axles.

SPECIFICATIONS

API GL-4
FORD M2C-86B
FORD M2C 134 B/C
MASSEY FERGUSON M-1135
CARRARO approved

STOU multifunctional oils

eni Multitech 10W-40

- STOU lubricants suitable for use in all devices (engine, transmission, hydraulics, wet brakes, power take-off and power steering).

SPECIFICATIONS

API CF-4/SF
ACEA E2
API GL-4
ALLISON C-4
CAT TO-2
JDM J 27
ZF TE-ML 06B, 06D, 07B
MF M-1144-1145
FORD M2C159-B

eni Multitech 10W-30

- STOU lubricants suitable for use in all devices (engine, transmission, hydraulics, wet brakes, power take-off and power steering).

SPECIFICATIONS

API CF-4/SF
ACEA E2
API GL-4
ALLISON C-4
CAT TO-2
JDM J 27
ZF TE-ML 06B, 06D, 07B
MF M-1139-1144, 1145
FORD M2C159-B

eni Multitech 15W-50

- STOU lubricants suitable for use in all devices (engine, transmission, hydraulics, wet brakes, power take-off and power steering).

SPECIFICATIONS

API CF-4/SF
ACEA E2
API GL-4
ALLISON C-4
CAT TO-2
JDM J 27
MB 228.1 w
MF M-1144-1145
ZF TE-ML 06B, 07B
FORD M2C159-B
FENDT VARIO



multifunctional oils

eni Multitech CT 10W

- Special multifunctional lubricants designed to meet the severe technical requirements by Caterpillar.
- It protects powershift transmission for best performances over all its technical life and eliminate brake chatters.

SPECIFICATIONS

CAT TO-4
ALLISON C-4
ZF TE-ML 03C level
KOMATSU KES 07.868.1
DANA Powershift transmissions
Vickers 35 VQ 25

eni Multitech CT 60

- Special multifunctional lubricants designed to meet the severe technical requirements by Caterpillar.
- It protects powershift transmission for best performances over all its technical life and eliminate brake chatters.

SPECIFICATIONS

CAT TO-4

eni Multitech CT 30

- Special multifunctional lubricants designed to meet the severe technical requirements by Caterpillar.
- It protects powershift transmission for best performances over all its technical life and eliminate brake chatters.

SPECIFICATIONS

CAT TO-4
ALLISON C-4
ZF TE-ML 03C 07F
KOMATSU KES 07.868.1
DANA Powershift transmissions



eni Multitech CT 50

- Special multifunctional lubricants designed to meet the severe technical requirements by Caterpillar.
- It protects powershift transmission for best performances over all its technical life and eliminate brake chatters.

SPECIFICATIONS

CAT TO-4
ALLISON C-4
KOMATSU KES 07.868.1
EATON



coolants

Special ethylene glycol-based coolant line recommended for an outstanding protection of the cooling circuits fitted on modern tractors and work machinery. The special formulations adopted guarantee heat exchange efficiency into the radiator ensuring safe engine operation even in severe operating conditions. All coolants are environmentally friendly since they are formulated without Nitrites, Ammines and Phosphates (N.A.P. free).



eni Antifreeze plus

- Concentrate coolant suitable for extended drain intervals formulated with organic acids and mineral inhibitors (hybrid technology).

SPECIFICATIONS

VW TL 774
C MAN Typ 324 NF
MB 325.0



eni Antifreeze spezial

- Concentrate coolant suitable for very long drain intervals.
- Special organic acid technology (O.A.T.) for durable performances and maximum protection from corrosion.

SPECIFICATIONS

VW TL 774
D/F (G12/G12+)
MAN Typ 324 SNF
MB 325.3



eni Antifreeze ready

- Ready-to-use pre-diluted coolant suitable for extended drain intervals.

SPECIFICATIONS

VW TL 774 C
MAN Typ 324 NF
MB 325.0



hydraulic fluids

Full range lubricants for excellent hydraulic and hydrodynamic performance. Available in several lines and viscosimetric gradations, these lubricants match all demands of work and agricultural machinery. The choice of the fluid depends on the type of use, on the operating conditions and on the characteristics of the components of the hydraulic system.



eni Arnica

- Superior quality "low-zinc" mineral antiwear hydraulic oils, with a very high viscosity index, developed to satisfy the needs of modern oleodynamic applications that operate in the severest conditions.

SPECIFICATIONS

ISO L- HV
DIN 51524 teil 3 HVLP
EATON VICKERS M-2950
LINDE
SUNSTRAND
REXROTH RE 90220-1/11.02
Parker Denison HF-0 Approval
Fives Cincinnati P-68, P-69, P-70

eni Oso

- High quality mineral-based "low-zinc" hydraulic oils offering excellent antiwear, demulsivity and filtration properties.
- They are designed as functional oils for all hydraulic systems and applications.

SPECIFICATIONS

ISO L- HM
DIN 51524 t.2 HLP
Fives Cincinnati P-68, P-69, P-70
LINDE
Parker Cincinnati HF-0 Level
SUNSTRAND
EATON VICKERS M-2950
REXROTH RE 90220-1/11.02

eni Arnica S

- Hydraulic fluids formulated from synthetic esters bases, characterised by a particularly high viscosity index and an extremely high flash point, properties which make these oils suitable for use in applications exposed to fire danger.
- Additionally, they are biodegradable and thus suitable where there is a risk of leaks, that may pollute the environment.

SPECIFICATIONS

ISO-L-HFDU
ISO-L-HEES

eni Arnica DV 46

- Mineral-based hydraulic oil, extremely high viscosity index and low pour point, with excellent deterging and antioxidant properties.
- Product is suitable for use in heavy machinery hydraulic circuits.

SPECIFICATIONS

ISO-L-HV
DIN 51524 t.3 HVLP-D



greases

eni offers a wide range of greases meeting all application needs. Greases for special applications at extremely low temperatures and heavy loads are also available.



eni Grease MSX 2/460

- Complex lithium synthetic base grease (PAO) containing a high percentage of molybdenum disulfide that ensures improvement of E.P. properties of additives.
- Specifically designed for the effective lubrication and protection of all types of bearings, gears and sections operating at low speed, heavy load and in wet environments.
Recommended temperature use: -40°C/+190°C.

SPECIFICATIONS

ISO-L-XDFHB 2
DIN KPFHC 2R -40

eni Grease MU EP 0

- Yellow-brown lithium and oil based mineral greases containing E.P. (Extreme Pressure) additives.
- They are suitable for lubrication of guides, plain bearings, heavily loaded ball and roller bearings at high load and average temperatures.
Recommended temperature use: -20°C/+120°C

SPECIFICATIONS

ISO-L-XBCHB 0
ISO-L-CKG 0
DIN KP 0K -20
DIN GP 0K

eni Grease LC 2

- Multi-purpose mineral-based lithium complex grease containing anti-rust, antioxidant and E.P. (Extreme Pressure) additives.
- Designed to suit applications operating at high temperatures and extreme pressure.
Recommended temperature use: -20°C/+150°C.

SPECIFICATIONS

ISO-L-XBDHB 2
DIN KP 2N -20

eni Grease MU EP 1

- Yellow-brown lithium and oil based mineral greases containing E.P. (Extreme Pressure) additives.
- They are suitable for lubrication of guides, plain bearings, heavily loaded ball and roller bearings at high load and average temperatures.
Recommended temperature use: -20°C/+120°C

SPECIFICATIONS

ISO-L-XBCHB 1
ISO-L-CKG 1
DIN KP 1K -20
DIN GP 1K

eni Grease SM 2

- Grey-black lithium and oil based mineral grease, containing molybdenum disulfide, suitable for lubrication of bearings and constant velocity joints subjected to extreme mechanical loading and thermal stresses, including roller bearings where the geometrical configuration results in a heavy wear problem.
- Can be used on worksites as a universal lubricant suitable both for heavy-duty machinery and for parts which are inaccessible when the plant is in operation and can be lubricated only at the start of each shift.
Recommended temperature use: -20°C/+120°C

SPECIFICATIONS

ISO-L-XBCHB 2
DIN KPF 2K -20

eni Grease MU EP 2

- Yellow-brown lithium and oil based mineral greases containing E.P. (Extreme Pressure) additives.
- They are suitable for lubrication of guides, plain bearings, heavily loaded ball and roller bearings at high load and average temperatures.
Recommended temperature use: -20°C/+120°C

SPECIFICATIONS

ISO-L-XBCHB 2
DIN KP 2K -20

How many components are there in a multifunctional oil for agricultural machines and what are they for?

Lubricant component	Role in the finished product
Base Oils	Lubrication and power transfer
Antioxidant	Fluid life prolonging
Viscosity index improver	Expanded temperature operation range of the fluid
Anti-wear	Anti-wear of mechanical parts
Corrosion inhibitor	Prevention of corrosion and rust
Friction modifier	Changes in the characteristics of internal friction of the lubricant to ensure proper torque transmission in clutch plates, preventing slipping and vibrations
Dispersant	Control of lacquers and sludge
Pour point improvers	Best machine operation at low temperatures
Anti seal-swelling agent	Prevents alteration of the rubber that can lead to oil leakage due to non sealing of the seal
Foam inhibitors	Foam development control
Coloring	Identification of the product





10 reasons why with eni

1 sustainability

Respectful use of resources, be it people or the environment. For example eni is also using re-refined base oils to produce certain lubricants where applicable.



2 trust

More than 60 years of experience in the lubricant business around the world.



3 internationality

eni lubricants are successfully sold in more than 100 countries.

4 world-class workforce

Working with eni means working with its highly motivated people committed to providing solutions to all customers every day.

5 research & development

More than 200 employees in research and development including the collaboration with the main research institutes in this field ensure **eni's** high-technology-position.

6 high-quality

Our products are based on a careful selection of the best raw material and additives in order to grant the best performing products.

7 integrated production cycle

eni produces finished products as well as its own base oils and additives.

8 customer care

Our personal mission is listen, understand and fulfil our customers' needs, hence involve them in our decision making process.

9 service

eni is committed to excellent and efficient service and high customer orientation with the aim to create value for all partners involved.

10 made in Italy

Italy's well renowned tradition and culture of design to improve the quality of life is a fundamental part of our thinking and products, so we are proud to export 'italianity' to all parts of the world.





eni spa

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Affix distributor's stamp here