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10 reasons to choose for Eni

1 Sustainability

Respectful use of resources, people and 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 materials 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

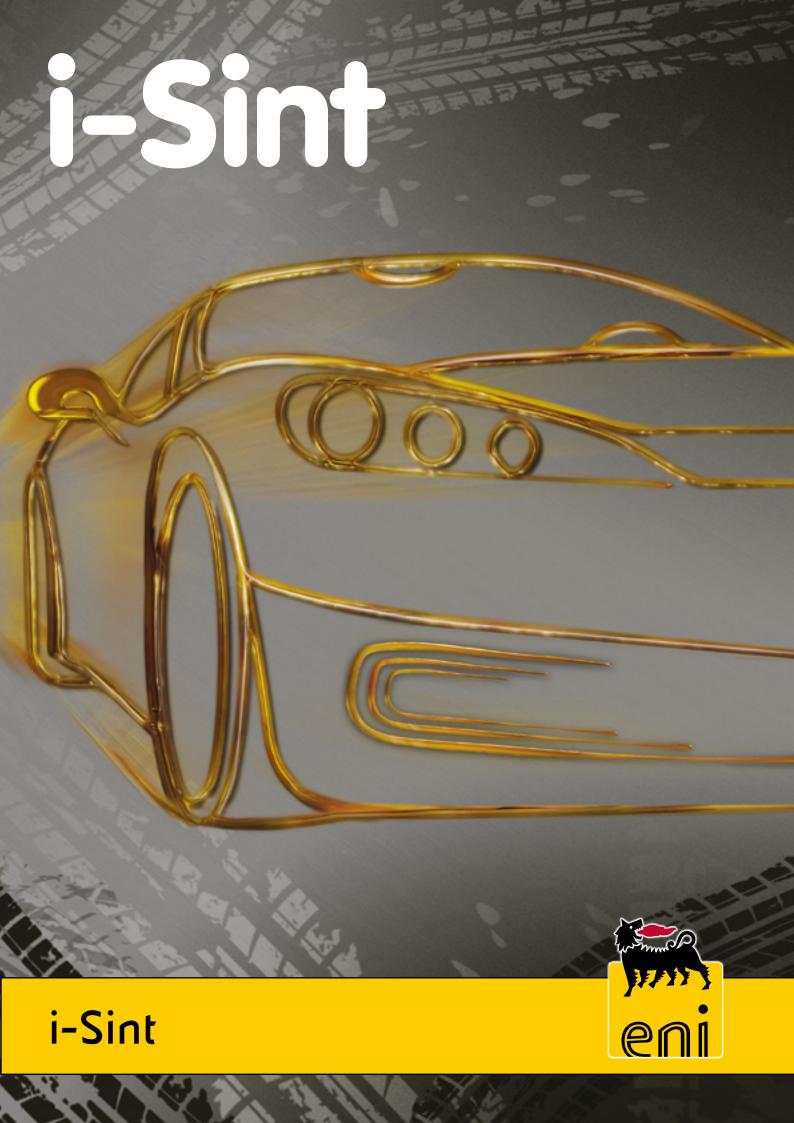
Our personal mission is listen, understand and fulfil our customers' needs, hence involve them in our decision making process.

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 renown 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 i-Sint

This line of high-performance lubricants is designed to meet the needs of the modern car fleet. It includes oils designed for the latest generation of engines which are particularly suited for vehicles fitted with anti-particle filters. i-Sint engine oils, designed to lubricate most of the existing car fleet, guarantee a high level of reliability in all driving

conditions, for all types of cars, from compacts to sports cars, with petrol or diesel engines. The Eni i-Sint range is a complete range of top synthetic and synthetic technology lubricants designed to meet the needs of all kind of engines in different weather and road conditions thanks to an accurate selection and balance of raw materials.

			exhaust gas after treatment systems compability	cold start lubrication	fuel economy	multi OEMs	oil drain interval
synthetic technology	0W-20	API SN RC ILSAC GF-5				۵	
top synthetic technology	0W-40	ACEA A3/B4 API SN MB-Ap- proval 229.5 VW 502 00 + 505 00 BMW LL-01 Renault RN 0700,0710 Porsche A40					
top synthetic technology	5W-30	ACEA C3, API SN, VW 504 00 + 507 00, BMW LL-04, Porsche C30, MB-Approval 229.51					
synthetic technology	5W-40	ACEA A3/B4, API SN, MB-Ap- proval 229.3, BMW LL-01, Renault RN 0700, 0710, VW 502 00, 505 00, Porsche A40					
synthetic technology	10W-40	ACEA A3/B4, API SN, MB-Ap- proval 229.3, VW 502 00 + 505 00					
synthetic technology	FE 5W-30	ACEA C2 API SN meets FIAT 9.55535 S1			(((())		
synthetic technology	MS 5W-30	ACEA C3, API SN, MB-Ap- proval 229.51, 229.52, BMW LL-04, VW 502 00 + 505 01, GM DEXOS 2 quality					
synthetic technology	MS 5W-40	ACEA C3, API SN, MB-Ap- proval 229.51, VW 502 00 + 505 00 + 505 01, BMW LL-04, Porsche A40			8		



Eni i-Sint tech

0W-30	ACEA A5/B5- 04 VW 503 00, 506 00,506 01	Top synthetic long-life lubricant designed for "Model year 2000" engines of Volkswagen group, with extremely high fuel economy, cold start qualities
M 5W-30	ACEA C1, C2, JLR 03.5005, FORD 934-B	Synthetic technology lubricant designed for Mazda engines. Extremely high compatibility with after-treatment systems, very high cold starting properties and fuel economy
ECO F 5W-20	ACEA A1/B1, API SN, Ford WSS-M2C 948-B	Synthetic technology lubricant specific for EcoBoost and Duratec Ford engines. It can be used also in other Ford models. Extremely high fuel economy, very high compatibility with after-treatment systems, very high cold starting properties
VV 0W-20	ACEA C5 Volvo RBSO-2AE	Synthetic technology lubricant designed for the newest generation of Volvo engines
R 5W-30	ACEA C4 Renault RN0720 MB 229.51, 226.51	Synthetic technology lubricant specific for Renault diesel engines. Suitable also for Mercedes models equipped with Renault diesel engines where RN 0720 is required. Extremely high compatibility with after treatment system, very high cold starting properties and fuel economy
F 5W-30	ACEA A5/ B5, ACEA A1/ B1, API SL/ CF, Ford WSS- M2C913-D, Renault RN 700	Synthetic technology lubricant designed for Ford engines. Very high cold start and fuel economy qualities
P 0W-30	ACEA C2, PSA B71 2312 level	Top synthetic lubricant developed for specific Peugeot and Citroën gasoline and diesel engines of passenger cars and and light vans.
P 5W-30	ACEA C2, API SN, PSA B71 2290	Synthetic technology lubricant specific for Peugeot and Citroën engines. Extremely high compatibility with after-treatment system, very high cold starting properties and fuel economy
G 5W-30	ACEA A3/B4- 04, API SL/CF, GM LL-A-025, LL-B-025	Synthetic technology formula designed and manufactured to meet lubrication requirements for GM engines, requiring lubricants with long replacement intervals (LL - Long Life) in accordance with the specifications: GM-LL-A-025 or GM-LL-B-025.
VK 0W-20	ACEA A1/B1, VW 508 00, 509 00, Porsche C20	Synthetic technology, especially developed for the lubrication of the current gasoline and diesel engings in the Volkswagen Group, also for the application with exhaust gas aftertreatment systems and for prolonged oilchange intervals.
VK 0W-30	ACEA C3, VW 504 00 + 507 00	High technology engine oil with mid SAPS characteristics, for modern passenger cars and light vans gasoline or diesel engines of Volkswagen Group with or without particulate filter (DPF) also at prolonged oil-change intervals according to the manufacturer's recommendation.

The Eni i-Sint tech line is aimed at customers looking for product excellence, which is able to satisfy the specific needs of some of the world's leading car manufacturers. Formulated using very high quality bases and highly innovative components, i-Sint tech lubricants are a technological response to the specific requirements of manufacturers.

Eni i-Sint professional

i-Sint Engine oils

This line has been specifically designed for professionals of the sector such as mechanics and accessory dealers. They meet the performance specifications of most important European and American bodies.

The applicability of the products in this line depends on the evaluation and the competence of professionals in the sector, who can also always rely on the Eni technical assistance team's support.

ı			exhaust gas after treatment systems compability	cold start lubrication	fuel economy	multi OEMs	oil drain interval
	5W-40	ACEA A3/B4-10, API SL/CF, MB 229.1, VW 501 01, 505 00 quality				٥	
	10W-40	ACEA A3/B4-08, API SL/CF, MB 229.1, VW 501 01, 505 00 quality				۵	



i-Sint Engine oils

Eni i-Base

Series of mineral engine oils for traditional engines featuring high reliability and cleaning of mechanical parts. This line guarantees high engine protection for the entire duration of the oil load.

ı			exhaust gas after treatment systems compability	cold start lubrication	fuel economy	multi OEMs	oil drain interval
professional	15W-40	API SJ/CF	\Diamond	۵	٥		
	15W-40	ACEA A3/B4-10, API SM/CF, MB 229.1, VW 501 01,505 00 quality				۵	



Eni Rotra

Eni lubricants for car transmissions have been designed to meet the main application needs for gearboxes and differentials used in both manual and automatic transmission systems.

The use of selected components allows the lubricant to offer a high protection on gears, in particular those subject to E.P.* and to keep the same performances for many kilometres.

Suitable for use in the latest generation vehicles as well as traditional ones.

85W-140

API GL-3

For mildly loaded gearboxes without hypoid type gears

Hy DB Synth 75W-90

API GL-4, MB-Approval 235.11

E.P. oil for gearboxes and axles with hypoid gears

MP 75W-80

API GL-5

E.P. oil for gearboxes and axles for which API GL-5 is required

MP DB 85W-90

API GL-5 MB 235.0 MIL-L-2105 D Level

E.P. oil for gearboxes and axles with hypoid gears, approved by Mercedes-Benz

LSX 75W-90

API GL-4 + GL-5, MB-Approval 235,8, API MT-1, SAEJ 2360 (ex MIL-PRF-2105E), MAN 341 type Z2, MAN 342 type S1, Scania STO 2:0 A FS, Volvo 97312, MACK GO-J, ZF TE-ML 02B, 05A, 12L, 12N, 16F, 17B, 19C, 21A

Top synthetic technology, high performance oil for heavily loaded gearboxes and axles, allows very extended oil drains

*E.P. (extreme pressure)

80W-90

API GL-3

For mildly loaded gearboxes without hypoid type gears

HY DB 80W

API GL-4, ZF TE-ML 2B, 17A, MB 235.1,

E.P. oil for gearboxes and axles with hypoid gears

FE 75W-90

API GL-4, VW 501 50 (G50) level

Synthetic technology with E.P. performance. Optimal characteristics for cold climates

MP 80W-90

Hy 80W-90

API GL-4, ZF TE-ML 02A, 16A, 17A, 19A, MIL-L-2105

With E.P. performance, for highly loaded

gears

FE 75W-80

API GL-4, MB 235.1, ZF TE-ML 06L, 08, 17A, 24A

Synthetic technology with E.P.

performance. Optimal characteristics for

cold climates

API GL-5, MIL L 2105 D, MAN 342 type M1, MAN 342 type M2, ZF TE-ML 05A, 07A, 08, 12E, ZF TE-ML 16B, 17B, 19B, 21A

With E.P. performance, for heavily loaded hypoid gears operating under high loads and temperatures

MP/S 85W -90

API GL-5 ZF TE-ML 05C, 12C, 16E, 21C

E.P. oil with 'limited slip' characteristics for self-blocking differentials (fitted with hypoid gears and wet clutches)

HLZ 75W-140

API GL-5 + LS, BMW BG 33, ZF TE-ML-05D, 12D, 16G,

A fully synthetic noise reducing hypoid gear oil, especially developed for BMW rear axles.

MP 85W-140

API GI-5 MILL 2105 D ZETE-MI 05A 07A 08 12E ZF TE-ML 16C, 16D, 21A, Volvo 1273.10

With E.P. performance, for heavily loaded hypoid gears operating under high loads and temperatures

Rotra SX-S 75W-90

API GL-5+LS, ZF TE-ML 05D*, 07A, MIL-L-2105D, FERRARI, MIL-PRF-2105E

Hypoid transmission oil on synthetic basis with highest-pressure properties (E.P.) and LS additives for extreme loads in locking differentials

Eni Rotra ATF

ATF II D

"Ford MERCON Level, GM DEXRON IID level, Allison C-4, Caterpillar TO-2, MAN 339 V-1 level, MAN 339 Z-1 level, MB 236.6, Voith H55.6335.xx, ZF TE-ML 04D, 05L, 09, 11A, 14A, 17C"

For automatic transmissions and power-steering systems requiring GM Dexron IID performance

ATF VI

JASO 1-A, GM DEXRON VI, Ford MERCON LV,

Top synthetic oil for latest technology automatic transmissions, featuring an exeptional low viscosity at low temperatures. It complies with most severe performance levels issued by the main international manufacturers

ATF MB

MB 236.14

Fully synthetic automatic transmission oil, specially developed for automatic transmissions where the MB 236.14 specification is recommended

ATF II E

GM DEXRON IIIH, GM DEXRON IIE, MAN 339 type V2, Z2, Z11, MB 236.9, ZF TE-ML 03D, 04D, 14B, 16L, 17C, 20B Voith H55.6336.xx

Top synthetic technology oil for automatic transmissions and power-steering systems, delivers exceptional performances and allows very extended oil drains

ATF Multi

JASO 1-A, Allison TES-295, BMW LT 71141, AISIN JWS 3309, Toyota T-IV, NISSAN MATIC D,J, K, CHRYSLER ATF+3/+4, MB-Approval 236.9, GM DEXRON IIIH, Ford MERCON/MERCON V

Top synthetic oil for automatic transmissions fitted on modern vehicles produces by most vehicles' manufacturers modern vehicles produced by the world leading manufacturers

ATF MB GT

MB 236.15

Fully synthetic automatic transmission oil, specially developed for automatic transmissions where the MB 236.15 specification is recommended

ATF III

GM DEXRON IIIG, Ford MERCON, MB 236.6, Allison C-4, MAN 339 type L - 1, MAN 339 type V - 1, MAN 339 type Z - 1, ZF TE-ML 04D, 05L, 09, 14A, 21L, Volvo 97340, Voith H55.6335.xx

For automatic transmissions and power-steering systems requiring GM Dexron IIIG performance

ATF DCT

BMW EU 83 22 2 148 578, BMW EU 83 22 2 148 579, VW G 052 529, VW TL 521 82

High performance fully synthetic long life ATF, specially developed for use in the latest generation DSG (double clutch transmission) transmissions of the VAG group

Eni Antifreeze

Eni Antifreeze products are ideal for use in the most modern vehicles since they help guarantee an effective coolant action for engines, including very highpowered engines; it also offers maximum protection against corrosion.

All products are highly biodegradable thanks to their 'NAP free' formula (Nitrites, Amines and Phosphates Free).

Extra Ready BX

AFNOR NFR 15-601, BS 6580, CUNA NC 956-16 (ed. '12), Meets requirements: UNE 26-361-88/1

Pre-mix silicate based coolant

Spezial BX

BS 6580, MB 325.3, ASTM D 3306, FORD WSS-M97B44-D, DEUTZ 0199-99-1115/2091, OPEL GM 6277M, FVV Heft R443, MAN 324 Tipo SNF, NATO S-759, O-Norm, RENAULT 41-01-001/Q type D, VW TL 774 D/F (G12/G12+)

Concentrate coolant with fully organic technology (O.A.T.), protective action and suitable for prolonged drain intervals

Plus BX

MB 325.3, ASTM D 3306, BMW, OPEL, MAN 324 Tipo SNF, MASERATI, NATO S-759, VOLVO, VW TL 774

Concentrate coolant with protective action, suitable for prolonged drain intervals

Spezial Ready BX

BS 6580, MB 325.3, ASTM D 3306, FORD WSS-M97B44-D, DEUTZ 0199-99-1115/2091, OPEL GM 6277M, FVV Heft R443, MAN 324 Tipo SNF, NATO S-759, O-Norm, RENAULT 41-01-001/Q type D, VW TL 774 D/F (G12/G12+)

Pre-mix coolant with fully organic technology (O.A.T.), protective action and suitable for prolonged drain intervals

Plus Ready BX

MB 325.3, ASTM D 3306, BMW, OPEL, MAN 324 Tipo SNF, MASERATI, NATO S-759, VOLVO, VW TL 774

Pre-mix coolant with protective action, suitable for prolonged drain intervals

Spezial G BX

VW TL 774 G (G12++)

Concentrate coolant with lobrid technology. Suitable for prolonged drain intervals and contains environmentally friendly additives

Eni Brake Fluids

For the best braking system performance in the most extreme conditions, Eni Brake fluids are the ideal solution. Even for racing, Eni Brake Fluid products guarantee a prompt and effective braking action.

Their special formula makes it possible to prevent dangerous vapour lock and to keep the braking circuit in perfect working order thanks to the anti-corrosion properties for metals and chemical compatibility with rubber seals.

Eni products comply with the severe performance standard issued by FMVSS116 DOT (Department Of Traffic) adopted by OEM's and that can be found in the maintenance booklet of the vehicles.

DOT 4 BX

SAEJ 1703, SAEJ 1704, RENAULT, F.M.V.S.S. No.116 DOT3 and DOT4, FIAT 9.55597, FORD, ISO 4925 Class 3 / 4,JIS K2233 Class 3 / 4, MAN, NH 800 A, OPEL / GM 1942421

DOT 5.1 BX

SAEJ 1703, SAEJ 1704, FMVSS 116, DOT 5.1, ISO 4925 Class 5.1,JIS K2233 Class 5





Top MS



High technology product line designed to meet all heavy duty vehicles needs, meeting the most stringent performance specifications set by the top manufactures in the sector. The line also includes lubricants designed specifically for new generation Euro V and Euro VI engines

fitted with exhaust gas aftertreatment system that require a special additive formulation to maintain their effectiveness. Top MS lubricants may be used for the maximum recommended oil drain intervals.

			drain interval	cold start qualities	engine protection	fuel economy	multi OEM
top synthetic technology	5W-30	ACEA E4, E6, E7, E9, API CJ-4, MB-Approval 228.51, 228.31, Volvo VDS-4, Deutz DQC IV-10 LA, MAN M 3677, M 3477, M 3575, M 3271-1, MACK EO-O Premium Plus, Caterpillar ECF-3, MTU type 3.1, Renault RVI RLD-3, Cummins CES 20081, Scania Low Ash, Detroit Diesel 93K218			<u>((((()</u>		
synthetic technology	10W-30	"ACEA E9, API CJ-4, Caterpillar ECF-1a, ECF-2, ECF-3, Cummins CES 20081, JASO DH-2, MAN M 3575, MTU type 2.1, Renault RVI RLD-3, Volvo VDS-4, MB-Approval 228.31, MACK EO-O Pre- mium Plus, Deutz DQC III-10 LA					
synthetic technology	10W-40	ACEA E4, E6, E7, E9, API CI-4, Caterpillar ECF-3, Cummins CES 20081, Detroit Diesel 93K218, Deutz DQC IV-10 LA, JASO DH-2-08, MACK EO-0 PP, MAN M 3271-1, M 3477, M 3575, MB-Approval 228.51, Renault RVI RLD-3, Scania Low Ash, Volvo VDS-4, MTU type 3.1			((((()))		(<u>(((())</u>
	15W-40	ACEA E7, E9, API CI-4/SN, MB-Approval 228.31, Caterpillar ECF-1a, ECF-2, ECF-3, Cummins CES 20076, 20077, 20081, Deutz DQC III-10 LA, MACK EO-O Pre- mium Plus, MAN M 3575, MTU type 2.1, Renault RVI RLD-3, Volvo VDS-4, Detroit Diesel 93K21			((((()))		
synthetic technology	Special TMS 10W-40	ACEA E6, E7, API CI-4, Deutz DQC IV-10 LA, MAN M 3477, 3271-1, Renault RVI RLD-2, MB-Approval 228.51, Volvo VDS- 3, MTU type 3.1, Cummins CES 20076, 20077, MACK EO-N			(((((()		



High technology product line capable of meeting the most demanding heavy duty vehicle needs. Like the Top MS line, these lubricants are innovative top of the range products which offer excellent performance and maximum oil drain intervals.

			drain interval	cold start qualities	engine protection	fuel economy	multi OEM
top synthetic technology	5W-30	ACEA E4, E7, API CI-4, MB-Approval 228.5, Deutz DQC IV-10, MACK EO-N, MAN M 3277, M 3377, MTU type 3, Renault RVI RLD-2, Volvo VDS-3, Cater- pillar ECF-1a, ECF-2				((((()	
synthetic technology	10W-40	ACEA E4, E7, API CF, Volvo VDS-3, MTU type 3, MAN M 3277, DAF Extended Drain, Cummins CES 20072, Voith Retarder Oil Class A, MB-Approval 228.5, Renault RVI RLD-2, ZF TE-ML 04C, MACK EO-N, Scania LDF-3, Deutz DQC III-10					

Performance

High performance line for conventional engines providing excellent reliability and cleaning of mechanical parts. Permits application of optimum oil drain intervals and, like all Eni lubricants, guarantees high level of engine protection and extended service life.

			drain interval	cold start qualities	engine protection	fuel economy	multi OEM
synthetic technology	E4 10W-40	ACEA E4, MB-Approval 228.5, MAN M 3277, M 3377, MTU type 3					
	E7 15W-40	ACEA E7, E5, E3, B3, API CI-4/CH-4/SL, MB-Approval 228.3, Deutz DQC III-05, MAN M 3275-1, MTU type 2, Volvo VDS- 3, MACK EO-N, Deutz DQC III-10, Cat ECF-1a, EFC-2, Renault RVI RLD-2				8	
	E3 15W-40	ACEA E3, API CG-4MB 228.1, MAN M 3275-1, MTU type 2					

Universal



Line of high performance lubricants suitable for heavy duty vehicles that can also be used in gasoline engines. Ideal for lubrication of mixed vehicles fleets. The lubricants comprising the universal line comply with stringent specifications and protect the engine from wear and deposits on the pistons.

			drain interval	cold start qualities	engine protection	fuel economy	multi OEM
synthetic technology	10W-40	ACEA E7, ACEA A3, B3, ACEA A3/B4, API CI-4, Renault RVI RLD-2, Volvo VDS-3, MB-Approval 228.3, MB-Approval 229.1, Cummins CES 20077, CES 20078, MACK EO-M-Plus, Allison C-4, Global DHD-1, JASO DH-1, MACK EO-N, MAN M 3275-1, MTU type 2					
	15W-40	ACEA E2, A3/B3-04, API CG-4/SL, MB 228.1, 229.1, MAN 271					

Monograde



Eni i-Sigma monograde is a lubricant for naturally aspirated and supercharged diesel engines operating under mild duty service conditions.

			drain interval	cold start qualities	engine protection	fuel economy	multi OEM
2	10W-20,30, 40,50	API CF/SI, MIL-L-2104 D, MIL-L-46152 C, Allison C-3					





i-Ride

Scooter



Engine oils for scooters designed for an extensive urban use and also suitable for extra-urban

			Performance:
mineral	2Т	JASO FC, API TC	 Minimizes formation of deposits and lacquer Ensures cleansing of the exhaust ports Reduces exhaust smoke
synthetic technology	10W-40	API SIJASO MA, MA2	 Reduces the formation of carbon deposit Suitable for stop & go use Extended oil change intervals Suitable for urban and extra-urban use Caters for wide operating temperature range
mineral	15W-50	JASO MA, MA2, API SJ	 Particularly recommended for urban use High detergency Reduced lubricant consumption
synthetic technology	MB 10W-30	API SI,JASO MB	Minimizes friction Specific for scooters requiring JASO MB standard lubricants

Racing

Lubricants designed to guarantee an excellent reliability and motor protection specially in the extreme conditions of motor sports competitions.

			Performance:
top synthetic technology	2Т	ISO-L-EGD, JASO FC/FD, HUSQVARNA	 Low exhaust smoke Low residue and deposits High compatibility with state-of-the-art catalytic converters Reduced power loss Maximum anti-seize protection
top synthetic technology	5W-40	JASO MA, MA2, API SL	 Resistance to high temperatures High stability Exceptional detergency
top synthetic technology	10W-60	JASO MA, MA2, API SL	 Resistance to high temperatures High stability Exceptional detergency



Street & Touring

Lubricants designed to guarantee an excellent motor reliability and protection; suitable for long highway driving and urban traffic use.

			Performance:
synthetic	Moto	API SL, JASO	 High wear protection Guarantees the integrity of moving parts Excellent detergency and dispersancy
technology	10W-30	MA, MA2	
synthetic	Moto	JASO MA, MA2,	 Guarantees a high mileage Protects from wear Reduces carbon deposit Recommended for touring vehicles
technology	10W-40	API SL	
mineral	Moto 15W-50	JASO MA, MA2, API SL	 Resistance to stress Recommended for multi-valve engines Guarantees motor protection and durability
top synthetic	Moto	API SLJASO	 High thermal and oxidation stability; maximum mechanical stability Excellent detergency and dispersancy Reduces the formation of sludge, lacquer, and deposits Recommended for sporty driving
technology	20W-50	MA, MA2	
mineral	Special 20W-50	JASO MA, MA2, API SJ	Excellent detergency and dispersancy

Offroad

Lubricants specifically developed to guarantee the highest possible performance, resistant to the strongest stress in offroad use.

			Performance:
top synthetic technology	Racing Offroad 10W-50	JASO MA, MA2, API SL	High detergency in extreme use conditions Ensures the long-term protection of the gearbox



Mineral and synthetic oil for lubrication of two-stroke engines, either with or without oil mixer. Ensures motor protection and detergency of inner parts, for all small motors that operate under moderate stress conditions.

			Performance:
mineral	MIX 2T	APITC	
synthetic / castor	Kart 2T		
synthetic technology	Snow Racing 2T	API TC, ISO-L- EGD, JASO FC	

Additional products

Eni completes its range of engine oils with ancillary products formulated to satisfy the everuday biker needs that cares for the maintenance of his/her vehicle and wants the best performance in any use condition.

Rotra is designed to satisfy the demands of manual gearboxes. Suitable to be used also for scooters. Its specific composition caters for a high protection of the gearings, as well as consistent performance in time.

Fork oil is designed for use in motorcycle/scooter forks and suspensions, suitable for both road and offroad performance.

Brake fluid is designed for braking systems and for servo motor commands for hydraulic clutches. Our line guarantees maximum efficiency and quickness of braking action.

			Performance:
eral	Chain Lube		 High-performance and water-resistant Excellent antifling characteristics Colloidal P.T.F.E. for added we ar and corrosion resistance
mineral	Rotra Bike 80W-90	APLGL-4	 Reduces friction and wear of the gearings Protects from corrosion and rust Eliminates/reduces noise and vibrations Prevents the formation of foam
synthetic technology	Rotra Bike Synth 75W-90	API GL-4 + GL-5	 Reduces friction and wear of the gearings Protects from corrosion and rust Eliminates/reduces noise and vibrations Prevents the formation of foam
	Fork oil Fork Oil 5 W Fork Oil 7,5 W Fork Oil 10 W Fork Oil 15 W		 Quick release of trapped air Maximum corrosion protection of inner parts Performance stability against temperature changes
	Brake Fluid DOT 5.1	FMVSS 116, DOT 5.1,SAE J 1703,ISO 4925/05 (CLASS 05)	 Prevents vapour lock Ensures perfect efficiency of the braking circuit Guarantees chemical compatibility with rubber seals
organic (O.A.T.) technology	Antifreeze Bike S	ASTM D 3306, CUNA NC 956-16 (ed. 12)	 Freezing protection Corrosion protection Extended coolant change intervals



Engine oils

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

i-Sigma Performance E7 15W-40

ACEA E7, E5, E3, B3, API CI-4/CH-4/SL, MB-Approval 228.3, Deutz DQC III-05, MAN M 3275-1, MTU type 2, Volvo VDS-3, MACK EO-N, Deutz DQC III-10, Cat ECF-1a, EFC-2, Renault RVI RLD-2

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

i-Sigma Top 10W-40

ACEA E4, E7, API CF, Volvo VDS-3, MTU type 3, MAN M 3277, DAF Extended Drain, Cummins CES 20072, Voith Retarder Oil Class A, MB-Approval 228.5, Renault RVI RLD-2, ZF TE-ML 04C, MACK EO-N, Scania LDF-3, Deutz DQC III-10

- · High performance fuel efficiency engine oil with synthetic
- High performance oil for the latest generation diesel engines (EURO V and VI)

i-Sigma Top MS 10W-40

ACEA E4, E6, E7, E9, API CJ-4, Caterpillar ECF-3, Cummins CES 20081, Detroit Diesel 93K218, Deutz DQC IV-10 LA, JASO DH-2-08, MACK EO-O PP, MAN M 3271-1, M 3477, M 3575, MB-Approval 228.51, Renault RVI RLD-3, Scania Low Ash, Volvo VDS-4, MTU type 3.1

- High performance oil for the latest generation diesel engines (EURO V and VI)
- Outstanding detergent and protection properties

i-Sigma Top 5W-30

ACEA E4, E7, API CI-4, MB-Approval 228.5, Deutz DQC IV-10, MACK EO-N, MAN M 3277, M 3377, MTU type 3, Renault RVI RLD-2, Volvo VDS-3, Caterpillar ECF-1a, ECF-2

- Top synthetic lubricant idea for extremely severe working conditions
- · Excellent fuel saving characteristics and cold start qualities
- · Ideal for extra extended oil drain intervals

i-Sigma Top MS 5W-30

ACEA E4, E6, E7, E9, API CJ-4, MB-Approval 228.51, 228.31, Volvo VDS-4, Deutz DQC IV-10 LA, MAN M 3677, M 3477, M 3575, M 3271-1, MACK EO-O Premium Plus, Caterpillar ECF-3, MTU type 3.1, Renault RVI RLD-3, Cummins CES 20081, Scania Low Ash, Detroit Diesel 93K218

- Top synthetic oil suitable for Euro VI and previous version engines
- · Excellent fuel saving characteristics and cold start qualities
- · Outstanding detergent and protection properties

i-Sigma Top MS 15W-40

ACEA E7, E9, API CJ-4/SN, MB-Approval 228.31, Caterpillar ECF-1a, ECF-2, ECF-3, Cummins CES 20076, 20077, 20081, Deutz DQC III-10 LA, MACK EO-O Premium Plus, MAN M 3575, MTU type 2.1, Renault RVI RLD-3, Volvo VDS-4, Detroit Diesel 93K218

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

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 organisations and required by most tractors and construction machinery operating today.

Rotra MP 85W-140

API GL-5,MIL L 2105 D,ZF TE-ML 05A, 07A, 08, 12E,ZF TE-ML 16C, 16D, 21A,Volvo 1273,10

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

Rotra MP/S 85W-90

API GL-5, ZF TE-ML 05C, 12C, 16E, 21C

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

Rotra Hy 80W-90

API GL-4, ZF TE-ML 02A, 16A, 17A, 19A, MIL-L-2105 Level

- Extreme pressure oil for hypoid gears, typical use in final drives and power take-off
- Anti-wear and anti-corrosion properties
- · High protection against rust and foaming

Rotra MP 80W-90

API GL-5,MIL L 2105 D,MAN 342 type M1,MAN 342 type M2,ZF TE-ML 05A, 07A, 08, 12E,ZF TE-ML 16B, 17B, 19B, 21A

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

Rotra MP DB 85W-90

API GL-5,MB 235.0,MIL-L-2105 D Level

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

Rotra Mp DB synth 75W90

API GL-5, Scania STO 1 : 0, MB 235.8, MAN 342 type S1, ZF TE-ML 12B, 16F, 17B, Volvo 97312

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

Rotra LSX 75W-90

API GL-4 + GL-5, API MT-1, MB-Approval 235.8, SAE J 2360 (ex MIL-PRF-2105E), MAN 341 type Z2, MAN 342 type S1, Scania STO 2:0 A FS, Volvo 97312, MACK GO-J, ZF TE-ML 02B, 05A, 12L, 12N, 16F, 17B, 19C, 21A

- 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 anti-wear and oxidation stability properties

Transmission oils

Rotra Multigear 75W-80

API GL-4, MAN 341 type Z4, ZF TE-ML 01L, 02L, 08, 13, 16K, DAF, Volvo 97305, Volvo 97307, IVECO, Renault Note Technique B0032/2 Annex 3, Eaton semi synthetic (300.000 km)

• Eni Rotra Multigear 75W-80 is an E.P. (Extreme Pressure) gear oil, suitable for use in heavy-duty manual gearboxes. It can be recommended specifically for transmissions fitted with intarder and retarder systems.

Rotra Truck Gear 85W-140

API GL-4, GL-5, MT-1, ZF TE-ML 2B, 5A, 7A, 12E, 16D, 21A, Scania STO-1 level, SAE J2360

- Special oil suitable for use in gearboxes and axles of construction
- Provides excellent thermal and oxidation stability for maximum protection even under severe load and temperature conditions

Rotra Truck Gear 80W-90

API GL-4, GL-5, MT-1, ZF TE-ML 2B, 5A, 7A, 12E, 16B, 17B, 19B, 21A, MAN 341 type E2, Z2, MAN 342 type M2, Scania STO-1 level, SAE J2360, NATO 0-226

- Special oil suitable for use in gearboxes and axles of construction machinery
- Provides excellent thermal and oxidation stability for maximum protection even under severe load and temperature conditions

Rotra Truck Gear S 75W-90

API GL-4/5 ZF TE-ML 02B, 05B, 12B, 16F, 17B, 19C, 21B, SAE 75W-90 MAN M 3343 Type S (withdrawn), MAN 341 Type Z2, Type E3, MAN 342 Type S1, MIL-L-2105E MB-Approval 235.8, Scania STO 1:0

· Fully synthetic, universally applicable gear oil for manual gears, transfer gears and differentials of modern commercial vehicles, passenger cars, agricultural and constructional equipment.

Multifunctional oils

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

Multitech JD/F

API GL-4, Allison C-4, Ford ESN M2C 134-D John Deere JDM J20C, Massey Ferguson M1135, M1141, M1143, M1145 Kubota UDT FLUID, Komatsu (KES 07.866), CNH MAT 3525, MAT 3526, MAT 3510, Ford ESN M2C 86B, C, FNHA-2-C-201.00, FN-HA-2-C-200.00, Volvo VCE WB 101, ZF TE-ML 03E, 05F, 06K, 17E, 21F level

- UTTO lubricant for transmission and hydraulics combined systems
- Suitable for lubrication of wet brakes axles
- Low viscosity at low temperatures for ensuring easy start even in rigid climates

- UTTO (Universal Tractor Transmission Oil): Lubricants potentially suitable for use in all auxiliary equipment, engine excluded.
- STOU (Super Tractor Oil Universal): Lubricants potentially suitable for use in engine and all auxiliary equipment fitted.

Multitech THT 15W-30

API GL-4, Allison C-4, Ford ESN M2C 86B, C, Ford ESN M2C 134-D, Massey Ferguson M1135, M1141, M1143, M1145, NEW HOLL. FNHA-2-C-201.00, ZF TE-ML 03E, 05F, 06K, 17E, 21F level

- UTTO lubricant for transmission and hydraulics combined systems
- Suitable for lubrication of wet brakes
- · Contains high quality anti-wear additives for better protection and correct systems operating

Multitech 10W-30

ACEA E2, API GL-4, API CG-4, API SF, John Deere JDM J27, Ford ESN M2C 159B, Caterpillar TO-2, Massey Ferguson M 1144, M 1145, Allison C-4, MB 228.1, ZF TE-ML 06B, 06C, 07B, DIN 51524-2 HLP

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

Multitech 15W-40

ACEA E2, API GL-4, API CG-4, API SF, John Deere JDM J27, Massey Ferguson M 1144, M 1145, Caterpillar TO-2, Allison C-4, MB 228.1, ZF TE-ML 06B, 06C, 07B, Fendt Vario

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

Multitech CT 30

Caterpillar TO-4,Allison C-4,ZFTE-ML 03C, 07F,Komatsu KES 07.868.1,DANA Powershift Transmissions

- Special multifunctional lubricants designed to meet the severe technical requirements of Caterpillar
- Protects powershift transmission for best performance during its service life and eliminates brake chatter

Super Tractor Universal 10W-30

API SF/CG-4/GL-4, ACEA E3-96, Mil-L-2104D

Meets the requirements of: Ford M2C159-C + M2C134-D, MB 227.1, John Deere J27 + J20C, ZF TE-ML 06B/07b, Cat TO-2, Allison C4, Massey Ferguson CMS M1135/M1139/M1143/M1144/M1145, NH 410B

- An up-to-date multifunctional lubricating oil for agricultural and earthmoving equipment, formulated with top-grade solvent refined base oils and additives, to achieve the following properties:
 - a powerful dispersion and detergency
 - a high activity against wear, corrosion and foam
 - a very strong resistance to oxidation
 - an excellent E.P. properties
 - a high and stable viscosity index

*E.P. (extreme pressure)

Multitech 10W-40

ACEA E2, API GL-4, John Deere JDM J27, Caterpillar TO-2, Massey Ferguson M 1144, M 1145, Allison C-4, ZF TE-ML 06B, 06C, 07B, API CG-4, API SF, MB 228.1, MIL-L-2105 D

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

Multitech CT 10W

ZF TE-ML 03C,Komatsu KES 07.868.1,DANA Powershift Transmissions,Caterpillar TO-4,Allison C-4,Eaton Vickers 35VQ-25

- Special multifunctional lubricants designed to meet the severe technical requirements of Caterpillar
- Protects powershift transmission for best performance during its service life and eliminates brake chatter

Multitech CT 50

Caterpillar TO-4,Komatsu KES 07.868.1,TREMEC/TTC,Eaton Vickers 35VQ-25

- Special multifunctional lubricants designed to meet the severe technical requirements of Caterpillar
- Protects powershift transmission for best performance during its service life and eliminates brake chatter

Antifreeze

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 operation conditions. All coolants are environmentally friendly since they are formulated without Nitrites, Ammines and Phosphates (N.A.P. free).

Plus BX/Plus Ready BX

MB 325.3, ASTM D 3306, BMW, OPEL, MAN 324 Tipo SNF, MASERATII NATO S-759, VOIVO V/W TI 774 C (G11)

· Concentrate or pre-mix (Ready) coolant with protective action, suitable for prolonged drain intervals

Spezial G BX

VW TL 774 G (G12++)

- · Full carboxylate-based technology coolant
- · Environmentally friendly

Extra ready BX

AFNOR NFR 15-601, BS 6580, CUNA NC 956-16 (ed. '12), Meets requirements: UNE 26-361-88/1

Pre-mixed silicate based coolant (traditional technology)

Spezial BX / Spezial Ready BX

BS 6580,MB 325.3,ASTM D 3306,FORD WSS-M97B44-D,DEUTZ 0199-99-1115/2091,OPEL GM 6277M,FVV Heft R443,MAN 324 Tipo SNF,NATO S-759,O-Norm,RENAULT 41-01-001/Q type D,VW TL 774 D/F (G12/G12+)

· Concentrate or pre-mix (Ready) coolant with full organic technology (O.A.T.), protective action and suitable for prolonged drain intervals

NM Ready BX

CAT EC-1

• Silicate free antifreeze which provides a long life and corrosion protection for all metals in the engine, including aluminum and ferro-alloys. It is recommended to replace the coolant every 5 years or above the recommended mileage or operating time.

Hydraulic Fluids

Full range of lubricants for excellent hydraulic and hydrodynamic performance. Available in several qualities and viscosity grades, these lubricants match all demands of construction and agricultural machinery. The choice of

Arnica ESB

hydraulic systems.

ISO 15380 HEES. Eaton Vickers 35VO-25. EU ECOLABEL - nº DE/027/142

fluid depends on the type of use, on operating conditions

and on the characteristics of the components of the

- Eco-friendly high performance hydraulic fluids based on saturated synthetic esters, readily bio degradable and not bioaccumulative
- Fulfills the requirements of the EU Ecolabel for hydraulic fluids

Arnica

Eaton Vickers M-2950-S, Rexroth RD 90220-01/12.10, Eaton Vickers I-286-S leve DIN 51524-3 HVLP, Fives Cincinnati P-70, Denison HF-0, ISO 11158 HV AFNOR NF E 48603 HVBS 4231 HSE Commercial Hydraulics Linde AISE 127 CETOP RP 91 H HV Sauer Danfoss 520L0463 Danieli Standard n. 0.000.001 - Rev.15 ZF TE-ML 04R

• Superior quality 'low-zinc' mineral anti-wear hydraulic oils, with a high viscosity index, developed to satisfy the needs of modern applications that operate in the severest conditions

Arnica S

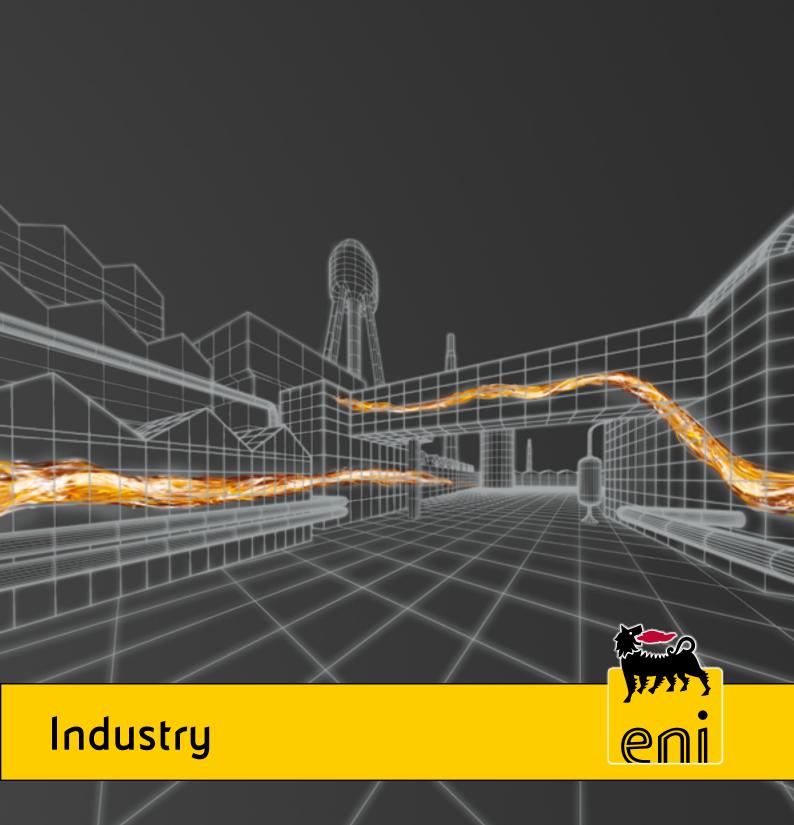
ISO 12922 HFDU, ISO 15380 HEES, Inline Hydraulik Gmbh, Rexroth RD 90221-01/03, Hoerbiger Micro fluid, VII Report of Luxemburg, Danieli Standard n. 0.000.001 - Rev.15

- Biodegradable synthetic oil for use in applications that are exposed to fire hazards or the risk of contamination of soil and land
- Resistant to heat / fire. It does not emit and is thermally stable

Arnica DV

ISO 11158 HV DIN 51524-3 HVLP-D

- Special hydraulic oil with very high viscosity index and withstands a lot of cold for optimal operation
- · Provides excellent thermal and oxidation stability



Hydraulic oils

Eni has developed a complete series of lubricants for hydraulic applications with excellent performance. The oils are available in various qualities and viscosity grades in order to satisfy all lubrication requirements. In addition to the normal hydraulic product line, Eni also developed a biodegradable line to comply with environmental regulations. The high quality lubricants possess a high viscosity index, excellent resistance to oxidation and aging and outstanding anticorrosion, anti-rust and anti-wear properties.

Mineral

Oso

ISO VG 10-150

ISO 11158 HM, DIN 51524-2 HLP, AFNOR NF E 48603 HM, BS 4231 HSD, Fives Cincinnati P-70 level, Eaton Vickers I-286-S Denison HF-0, HF-1, HF-2, Rexroth RD 90220-01/12.10, ATOS Table P002-1/E Danieli Standard n. 0.000.001 - Rev. 15, Mulle Weingarten DT 55 005, ZF TE-ML 04K

High quality hydraulic oils specially developed for use in all types of hydraulic systems and equipments.

Detergent-dispersant hydraulic oils for use in circuits where water is or can be present. They are obtained from highly-refined base stocks containing additives of anti-corrosion, antioxidant and anti-wear.

Oso S

ISO 11158 HM, DIN 51524-2 HLP, AFNOR NF E 48603 HM, BS 4231 HSD, Denison HF-0 level, Fives Cincinnati P-70 level, Eaton Vickers I-286-S level, Eaton Vickers M-2950-S

Ashless, high quality hydraulic oils developed for use in all types of hydraulic systems and equipment, specially where products with very high filterability are required. Formulated from selected paraffinic base stocks treated with anti-rust, antioxidant and anti-wear additives.

Oso PM

Special ashless, high quality hydraulic oils characterized by very high anti-wear properties. Formulated from selected paraffinic base stocks treated with anti-rust, antioxidant and anti-wear additives.

Arnica

Eaton Vickers M-2950-S, Rexroth RD 90220-01/12.10, Eaton Vickers I-286-S level, DIN 51524-3 HVLP, Fives Cincinnati P-70 Denison HF-0, ISO 11158 HV AFNOR NF E 48603 HVBS 4231 HSE Commercial Hydraulics Linde AISE 127 CETOP RP 91 H HV Sauer Danfoss 520L0463 Danieli Standard n. 0.000.001 - Rev.15 ZF TE-ML 04R

Mineral lubricant, specially developed for use in hydraulic systems requiring fluids possessing an extremely high Viscosity Index and a very low pour point for correct operation.

Arnica DV

Special hydraulic fluid with a high Viscosity Index and a low pour point, particularly suitable for use in ceramic industry presses.

Arnica P

DIN 51524 Part 3 (Draft) Category HV, AFNOR NF E 48600 Category HV, CETOP RP 91 H Category HV

Mineral hydraulic oil formulated expressly for use in Poclain machinery. It can also be employed in all hydraulic systems that require fluids with high Viscosity Index and low pour point.

Hydraulic oils

Mineral and fire resistant

Arnica 104/FR

SO VG 46

VII Report of Luxemburg, Danieli Standard n. 0.000.001 - Rev.15, ISO 12922 HFC, ISO 15380 HFPG Non-flammable hydraulic fluid with high VI and low pour point. It consists of a glycol/water solution additive-treated to prevent corrosion.

Synthetic

Arnica LT

ISO VG 15

ISO L-HV, ISO 11158 HV, DIN 51524 parte 2 -HVLP, DENISON HF 0 level, EATON VICKERS M-2950-S, I-286-S Red coloured hydraulic oil having a very high viscosity index and very good properties at low temperatures. Formulated from highly refined, paraffinic base oil and ashless additives. The special formulation ensures a high viscosity index, very low pour point, anti-wear and anti-rust properties, good filtrability and very high thermal and oxidation stability.

Arnica PSX

ISO VG 40

ISO 11158 HV, DIN 51524-3 HVLP-0

Hydraulic fluid, with very high performances, specially developed for use in ceramic industry presses. The synthetic base, treated with special additive packages, possesses detergent/dispersant, antioxidant, anti-rust and anti-wear properties. It allows longer oil change intervals than typical with mineral oils.

Synthetic and biodegradable

Arnica ABX

SO VG 1

ISO-L-HE.P.R; ISO 15380 - HE.P.R; WGK 1 (Water hazard class).

Biodegradable hydraulic fluid, containing antioxidants, anti-rust, anti-wear and friction modifier additives. It has excellent features at low temperature and it is characterized by a very high VI.

Arnica ESB

ISO VG 32,46

ISO 15380 HEES, Eaton Vickers 35VQ-25, EU ECOLABEL (n° DE/027/142) 'eco-friendly' high performance hydraulic fluids based on saturated synthetic esters, readily biodegradable and not bio-accumulative. EU ECOLA-BEL registered.

Arnica Extra Plus

ISO VG 4

Fast biodegradable hydraulic fluid on synthetic ester basis for all high loaded hydraulic systems.

DIN 51524 Part 3 (Draft) Category HV, EU ECOLABEL (n° DE/027/118), AFNOR NF E 48600 Category HV, CETOP RP 91 H Category HV

Arnica V

ISO VG 32, 46, 6

ISO 15380 HETG, WGK

Biodegradable hydraulic fluid, synthesized from selected natural esters. Intended for those applications where the problem of environmental pollution is prevalent.

Hydraulic oils

Synthetic and fire resistant

Arnica S

ISO VG 46 - 68 ISO VG 32 - 46 - 68

ISO 12922 HFDU, ISO 15380 HEES, Inline Hydraulik Gmbh, Rexroth RD 90221-01/03, Hoerbiger Micro fluid, VII Report of Luxemburg, Danieli Standard n. 0.000.001 - Rev.15

Biodegradable synthetic fluids for use in applications particularly exposed to fire hazards or involving soil-contamination risks. Formulated from synthetic bases composed of organic esters treated with special additive packages.

Arnica S FR

Biodegradable synthetic lubricant, Factory Mutual approved as fire resistant hydraulic fluid, suitable for use where it is exposed to the risk of fire hazards and environmental pollutions. Formulated with organic ester and specific additives.

Gear oils

Eni gear oils have been developed to meet the widest range of requirements for (E.P.) lubrication. The Blasia range is characterized by the high quality of used components, which provide excellent performance in terms of lubrication, protection and long-service life. Both mineral and synthetic based products contain additives, that ensure the capability of the oil to withstand the high loads it can be exposed to.

Mineral

Blasia

ISO VG 32 - 680

ISO 12925-1 CKD, DIN 51517-3 CLP, AIST No.224, ANSI/AGMA 9005-E02, David Brown S1.53 101 level, Fives Cincinnati P-76 level, Muller Weingarten DT 55 005 CLP Developed to meet the widest range of requirements of E.P. lubrication, such as gears operating under severe duty.

Blasia P

ISO VG 1000 2200 3200

ISO 12925-1 CKC, DIN 51517-3 CLP, ANSI/AGMA 9005-E02, David Brown S1.53 101 level Very viscous oil treated with E.P. additive to ensure proper lubrication of heavily loaded, slow-moving parts. The two ISO VG grades 1000 and 2200 are mineral based, whereas the 3200 is partially synthetic.

Mineral and fire resistant

Blasia BM

SO VG 220

ISO 12925-1 CKD, DIN 51517-3 CLP, ANSI/AGMA 9005-E02

Developed to meet the widest range of requirements where E.P. properties are requested (gears operating under severe duty). Manufactured from paraffinic base stocks and additives (sulphur and phosphorus compounds), to ensure good high-speed and shock-load performance. The presence of molybdenum compound ensures reliable wear protection under shock loads and unfavorable operating conditions cushioning vibrations and muffle noise.

Blasia FMP

ISO VG 100 - 460

ISO 12925-1 CKD, DIN 51517-3 CLP, AIST No.224 ANSI/AGMA 9005-E02, Fives Cincinnati P-74 level, David Brown 51.53 101 level, Muller Weingarten DT 55 005 CLP - level, Danieli Standard n. 0.000.001 -Peu 15 Sierrens MD (Flender) Peu 15 Very high performance gear oils for lubricating in E.P. of the latest generation industrial gear reducers, in particular, those extremely compact and of high specific power that could have problems of micropitting damages.

Fin 332/F

360 E.P./

"ISO 6743/6 CKH-DIL, DIN 51513 BC-V"

Very adhesive black-coloured mineral-based lubricants suitable for lubrication of machinery exposed to the atmosphere.

*E.P. (extreme pressure)

Gear oils

Synthetic

Blasia S

ISO VG 150 - 460

ISO 12925-1 CKE ISO 12925-1 CKT DIN 51502 CLP-PG ANSI/AGMA 9005-E02 Sacmi 200.02.A01

High pressure gear oil based on synthetic base oils of Polyglycol type for the lubrication of high loaded spur and worm gears as well as rolling and sliding bearings under extreme operational conditions.

Blasia SX

Developed for the lubrication of gears an bearings operating at high temperatures. It is formulated from a synthetic base (polyalphaolefin) and additive-treated to impart appropriate anti-rust, anti-wear properties and exceptional oxidation and thermal stability.

Blasia FSX

"ISO 12925-1 CKD DIN 51517-3 CLP ANSI/AGMA 9005-E02 AIST No.224 Fives Cincinnati P-74 level David Brown S1.53 101 level Siemens Flender BA 7300 Table A - level"

Very high performance synthetic (PAO) gear oils for lubricating in E.P. of the latest generation Industrial gear reducers, in particular, those extremely compact and of high specific power that could have problems of micropitting damages.

Arum HT

Superior quality lubricant formulated from special ester-type synthetic bases which leave no deposits at high temperatures. It is additive-treated to impart anti-wear properties and exceptional oxidation resistance.

Synthetic and biodegradable

Blasia ESB

Formulated from biodegradable synthetic bases composed of esters treated with special additive packages.

ISO 12925-1 CKC DIN 51502 CLP-E

^{*}E.P. (extreme pressure)

Compressor oils

The Eni product line for compressors comprises of products for high and low temperature applications. When compressing a gas, the lubricant is exposed to high temperatures and, especially in case of air compression, high oxidative stress. The Eni Dicrea product line is a complete series of lubricants for air and Industrial gas compressors. The lubricants are very stable at high temperatures, limiting the formation of deposits in the hot areas. The Eni Betula product line is a range of lubricants for refrigeration compressors. Even at very low temperatures, the lubricant is still sufficiently fluid to be able to ensure lubrication. Moreover, the lubricant is tolerant with respect to the cooling medium.

Air Compressors - Mineral

Dicrea

ISO VG 32 - 320

ISO 6743/3 DAH ISO 6743/3 DAB DIN 51506-VD ISO 6743/3 DVA Mineral oils, formulated with paraffinic base stocks, recommended for the lubrication of air compressors, including those with very high air delivery temperatures (200°C or more). The ISO VG 32 and 46 have been developed specifically for rotary compressors (screw and vane).

Air Compressor - Synthetic

Dicrea SX

SO VG 32, 46, 6

ISO 6743/3 DAB ISO 6743/3 DAJ DIN 51506-VDL

Synthetic oils with a polyalphaolefin base. They are compatible with the type of rubber used in air compressors. Due to the fully synthetic base, maintenance intervals can be significantly extended compared to mineral based lubricants.

Dicrea ESX

ISO VG 100

DIN 51506-VDL ISO 6743/3 DAB ISO 6743/3 DA

Synthetic oil with an ester base. It minimizes the formation of damaging carbon deposits and sludges on the valves. It has been specifically designed for reciprocating compressors.

Gas Compressors - Synthetic

Dicrea S

SO VG 150

Fully synthetic lubricant with a polyglycol base developed specifically to guarantee outstanding lubrication for compressors handling natural gas, LPG, ammonia and chlorine-fluorine derivatives.

ISO 6743/3 DRB ISO 6743/3 DGC Sulzer Burckhardt

Compressor oils

Refrigerator Compresor - Mineral

Betula

Formulated with special naphthenic base oils appropriately refined, for all types of refrigerants (ammonia, freon 12, freon 22 etc.).

Refrigerator Compresor-Synthetic

Betula S

ISO 6743/3 DRA ISO 6743/3 DRC ISO 6743/3 DRE DIN 51503 KAA DIN 51503 KC

Formulated with special synthetic base (PAO). Intended for lubrication of refrigeration compressors (reciprocating, rotary-screw and vane) of the closed domestic type, open and semi-sealed Industrial units for refrigeration, or heat pump systems using all types of refrigerant (ammonia, Freon 12, Freon 22 etc.). They may also be used in other equipment and machinery operating at very low temperatures.

Betula ESX

Formulated with special synthetic base (polyolesthers), used in refrigerators where HFC refrigerants are used (R134a, R 404a, R407c, R507).

Stationairy engine oils

These are products intended for all those applications where internal combustion engines are used for generating electric power. This category of lubricants comprises oils for application in engines running on diesel fuel or fuelled by natural gas or landfill gas (biogas). Considering the delicacy of the application, it is fundamental to receive, besides the high quality of Eni Geum, also Eni's technical support.

also Ellis technical support.				
Mineral				
Geum SAE 40 Caterpillar Rolls-Royce MDE MTU Dresser-Rand	Eni Geum 40 is a lubricant for stationary engines, spark-ignition type, burning natural or methan gas where a low ash oil is required. Eni Geum 40 is formulated with high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, antioxidant, anti-wear and anti-foam properties.			
Geum C SAE 40 Wartsila Guascor	Eni Geum C 40 is a lubricant for stationary engines, spark-ignition type, burning natural or methan gas where a low ash oil is required. Eni Geum C 40 is formulated with high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, antioxidant, anti-wear and anti-foam properties. The product has a low content of phosphorus.			
Geum E SAE 40 MAN 3271-4 level	Eni Geum E 40 is a lubricant for modern stationary engines, spark-ignition type, burning landfill gas, biogas or other gases with a high rate of acidity. Eni Geum E 40 is formulated with high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, anti-wear and anti-foam properties. The product has a high content of sulphated ashes and a low content of phosphorus.			
Geum NG SAE 40 GE Jenbacher engines type 2/3/4/6 on gas class A and B MWM Wartsila	Eni Geum NG 40 is a lubricant for modern stationary engines, spark-ignition type, burning natural gas, methan or biogas where a low ash oil is required. Eni Geum NG 40 is formulated with high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, anti-wear and anti-foam properties. The product retains a particularly high resistance to oxidation processes.			
Geum LFG SAE 40 GE Jenbacher engines type 2/3/4/6 on gas class B and C MAN M 3271-4	Eni Geum LFG 40 is a lubricant for modern stationary engines, spark-ignition type, burning landfill gas, biogas or other fermentation gases (digestors). Eni Geum LFG 40 is formulated with high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, anti-wear and anti-foam properties. The product retains a particularly high resistance to oxidation processes and low content of phosphorus.			

Semi Synthetic

Geum SX

SAE 40

Eni Geum SX 40 is a synthetic technology lubricant for stationary engines, spark-ignition type, burning natural or methan gas where a low ash oil is required.

Rolls-Royce

Eni Geum SX 40 is formulated with very high Viscosity Index basestocks and selected additives that deliver detergent-dispersant, antioxidant, anti-wear and anti-foam properties.

Circulation oils

Eni circulation oils are developed for use in circulation systems, intended for the lubrication of bearings, crankshafts, oil-filled couplings and gears, where no E.P. properties are required. The oils can also be used in hydraulic systems, where resistance against aging and anti-rust properties are required. The different viscosity classes of the Eni product line make it possible to select the right oil for all operating conditions.

Mineral Radula Radula oils are recommended for most machinery lubricated by a circulation system. ISO 11158 HH BS 4231 HSB Acer High quality (R&O) lubricants for use in circulation systems and hydraulic circuits. These oils are based on selected paraffinic base oils with anti-oxidation and anti-corrosion additives. Suitable for use in circulation systems. These oils are based on selected pa-Acer MP ISO VG 100 - 460 raffinic base oils with anti-oxidation and anti-corrosion additives. Excellent demulsibility even in the presence of large quantities of water Danieli Standard n. 0.000.001 - Rev. 15 Acer MPK Special lubricant specifically intended for simultaneous lubrication of bearings and gears under high temperatures. Mainly used in the paper

Heat transfer oils

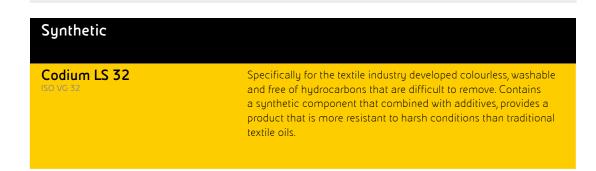
Eni's product line for filling heat transfer units can be used in all open or closed systems. The different viscosity grades enable selection of the most suitable oil for operating conditions. The oils have excellent oxidation stability and withstand thermal decomposition. They also have high demulsibility property and air release performance, thus ensuring proper operation of the heat transfer unit.

Synthetic and biodegradeable		
Alaria 2,3,7 ISO 6743/12 QB	Based on paraffinic mineral oils, intended for use in open and closed systems at a max. surface temperature of 340° C (2), 320° C (3) or 315° C (7).	
Alaria 3 HT ISO VG 32	Based on paraffinic mineral oils, intended for use in open and closed systems at a max. surface temperature of 350°C.	

Textile oils

The Eni Codium series are special oils for the textile industry, formulated using colourless oils that, due to their extreme degree of refining, are free of hydrocarbons that are difficult to remove. A particular additive treatment provides these products with certain features that distinguish them as high quality textile oils with excellent anti-rust properties for the protection of lubricated components, optimum adhesiveness and anti-drip properties, good wash ability for removal of any traces of oil from the fabric and they are free of colouration to minimize any effects of residual contamination after washing.

Codium L ISO VG 46, 100 Specially for the textile industry developed colourless, good washable and and free of hydrocarbons that are difficult to remove.



White oils

Eni's OBI line of white mineral oils are highly refined, colourless, tasteless and odourless and mainly used for pharmaceutical, cosmetic and phytopharmaceutical applications. The OBIT line is a technical white vaseline with a slight petroleum odour, which is suitable for the lubrication of precision mechanisms.

Mineral	
Obi 10 ISO VG 68 Farmacopea Italiana Farmacopea Europea US FDA, 21 CFR 172.878 US FDA, 21 CFR 178.3620 (a)	Eni OBI 10 is a highly refined white mineral oil suitable for pharmaceutical use, cosmetic and phyto-pharmaceutical applications. The particular properties of the oil, make it suitable as a lubricant in specialised industrial applications such: CO2 compressors for dry ice production, SO2 refrigerator compressors and ethylene compressors for polyethylene production.
Obi 12 ISO VG 15 Farmacopea Italiana Farmacopea Europea US FDA, 21 CFR 172.878 US FDA, 21 CFR 178.3620 (a)	Eni OBI 12 is a highly refined white mineral oil suitable for medicinal use, preparation of perfumery and cosmetics products.
Obi T 13 ISO VG 15	Eni OBI T 13 is a technical white vaseline oil with a slight petroleum odour. It is suitable for lubrication of precision mechanisms, watches, firearms and textile machinery. It is also used as a fungicide and as a plasticizer in rubber.

Turbine oils

Turbine oils

Ote

ISO 8068 TSA/TGA

DIN 51515-1 TD, BS 489:1999, Ansaldo Energia 606W807 Rev.C (2012), GE GEK 28143B, Siemens TLV 9013 04, ASTM D 4304 Type I, JIS K 2213 - 1983 Type II, Doosan Skoda Power, Nuovo Pignone SOM 17366, Mitsubishi Spec. NO. E00-001 Rev.2, CEI 10-8 (1994)

Top quality mineral oil designed to satisfy even the most severe lubrication requirements of steam, gas and water turbines, having especially high oxidation and aging resistance as well as very high demulsibility.

Ote GT

THERMODYN ISPSH902SDI, MAN GHH BORSIG SP MAT812107, SOLAR ES 9-224U - Class II, ALSTOM HTDG 90117 V0001 X, Ansaldo Energia 606W807 Rev.C (2012), Ansaldo Energia TGO2-0171-E00001/8 (2016), Siemens TLV 9013 04, Siemens TVL 9013 05

Superior quality lubricants specifically designed for use in gas turbine applications, formulated with selected base stocks and specially chosen additives to ensure an exceptional resistance to oxidation and anti-rust. It's "mild E.P." properties makes it suitable for lubrication of turbine reduction gear units.

Special oils

Under the header "special oils" belong very diverse products. Like all products in Eni's range, the highest attention was paid to the specific application whilst formulating the products. The products are of the highest quality and are ideal for deployment in the toughest conditions in the envisaged application.

Mineral	
Exidia HG 68 DIN 51502 COLP, Stanimuc GA + GB, ISO 11158 HG, ISO 6743/13 GA, ISO 6743/13 GB	Eni Exidia HG 68 is a premium quality lubricant especially designed for slideways, even under high loads, with circulation and total loss lubrication systems.
ASP ISO VG 100, 150, 220	Adhesive oil on mineral oil base, reducing oil consumption in the event of loss-lubrication, centrifugal forces and vibrations.
ASP C ISO VG 32, 100	Special mineral oil with tackiness properties. It absorbs moisture. Intended for use in pneumatic tools as well as in the paper, textile and packaging industry.
Acer MV ISO VG 10	Special oil with very low viscosity, based on selected base stocks with anti-rust, antioxidant and anti-wear additives. It is specifically designed for the lubrication of fast spindles of machine tools.
ITE 600 IEC 60296 ed. 4 (2012) - type U	A mineral insulating uninhibited oil for transformers. It is formulated from a highly refined petroleum base stock to impart excellent dielectric properties.
VAS 460, 900 ISO VG 460, 1000	Eni VAS is a straight mineral oil specifically designed for lubrication of cylinders of steam engines where condensate is recovered.

Industry

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.

MSX 2/460

ISO 12924 L-XDFHB 2. DIN 51825 KPFHC 2R -40

- E.P. lithium complex grease, formulated with ISO VG 460 synthetic base oil (POA). The presence of high percentage of solid lubricant (molybdenum disulphide) improves the E.P. properties
- Designed for the effective lubrication and protection of all types of bearings, gears and components. Operating at low speed, heavy load and in wet environments.
- Recommended temperature use: -40/+190 °C

SM₂

ISO 12924 L-XBCHB 2, ISO 6743/6 L-CKG 2, DIN 51825 KPF 2K -20, DIN 51826 OGPF 2K -20

- Grey-black lithium and mineral oil based, containing molybdenum disulfide, suitable for lubrications of bearings and subjected to extreme mechanical loading and thermal stresses
- Can be used as an universal lubricant suitable for both heavy duty
 machinery and for parts which are inaccessible when the plant is in
 operation and can lubricated only at the start of each shift
- Recommened temperature use: -20/+120 °C

MU E.P. 0-1-2-3

ISO 12924 L-XBCHB 2,DIN 51825 KP 2K -20

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

LC 2

ISO 12924 L-XBDHB 2, DIN 51825 KP 2N -20

- Multi-purpose mineral-based lithium complex grease containing anti-rust, antioxidant and Extreme Pressure additives
- Designed to suit applications operating at high temperatures and FP
- Recommended temperature use: -20/+150 $^{\circ}\text{C}$

LCX VG 32-100-220

ISO 12924 L-XEDHB 2, DIN 51825 KPHC 2N -50

- Lithium complex greases formulated with synthetic base oil (PAO) containing anti-wear and Extreme Pressure additives to provide outstanding performance where sliding, friction and high loads are present, whilst stability of the grease is assured
- Recommended temperature use: -50/+170 $^{\circ}\text{C}$

TOP 2000

DIN 51825 KP 2K -30, ISO 12924 L-XCBHB 2

- Soft Externe Pressure grease with excellent bonding
- Suited for environments containing moisture, (sea) water, manure and plant based conservants.
- Recommended temperature use: -35/+110 °C

^{*}E.P. (extreme pressure)

Greases

Autol Top 2000 W

KP 1 G-35 extremely

AUTOL TOP 2000 W is a soft special grease with exceptional adhesive properties and very good E.P. properties - a real Super Longtime Grease suitable for very long regreasing intervals.

Autol Top 2000 High Temp

KP 2 P-20

AUTOL TOP 2000 HIGH TEMP is a high pressure grease of the consistence class 2 with exceptionally good adhesive properties. It has an extreme mechanical and thermal stability, protects the lubrication points against corrosion and is waterresistant.

Autol Top 2000 Bio

KPE 2 K-35

AUTOL TOP 2000 BIO is a lithium soap grease of the consistence class 2, based on biodegradable synthetic base oils for the save lubrication of roller and slide bearings respectively other lubrication loss points. The combination of the good corrosion protection and the high-pressure absorption capacity with the special adhesive properties it is suitable for the application under severe condition.

Autol Top 2000 Fettspray

AUTOL TOP 2000 Fettspray is a special lubricating grease based on the effective AUTOL TOP 2000 Super-Longtime-Grease. By containing it in a spray can the grease can be exactly, economically and safely sprayed onto lubricating points that are hard to reach.

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^{*}E.P. (extreme pressure)



Engine oils

Eni offers a line of lubricants for marine crosshead Diesel engines formulated from a high-quality base stock, additive-treated to guarantee superior cylinder lubrication of two-stroke crosshead diesel engines:

Low Speed	
Punica 570	Oil for the lubrication of two-stroke crosshead diesel engines operating with medium or high sulphur residual fuel oil
Punica 540	Oil for the lubrication of two-stroke crosshead diesel engines operating with low sulphur residual fuel oil
Cladium 50 SAE 40	Detergent lubricant formulated from an additive-treated high-quality base stock, suitable for use as crankcase oil in large crosshead engines. It can also be used as a stern tube lubricant.

Eni has developed a complete series of lubricants to satisfy the lubrication needs of four stroke marine diesel engines.

Medium Speed	
Cladium 120 SAE 30/40 API CF	Specifically formulated for naturally-aspirated or even highly supercharged marine diesel engines. Its additive package is suitably balanced in order to permit the use of either gasoil or marine diesel fuels, while ensuring top performance in engines with very high mean effective pressures. Despite its high detergent/ dispersant efficiency, the demulsibility characteristics allow rapid separation of water accidentally entering the engine.
Cladium 300 SAE 30/40	Lubricant for use in four-stroke diesel engines operating on residual fuels and under conditions which ask an oil with a medium-high TBN. The product is specifically designed for diesel engines, which form significant amounts of acid mist versus a low power or stop-and-go activities.
Cladium 400 SAE 30/40 API CF	Four-stroke engine oil for use in diesel engines that operate with a high sulfur content, thus requiring a particularly high TBN, particularly in operating conditions. It has so much calcium carbonate reserve in order to fight efficiently the formation of acid mists as a result of the use of fuel oil with a very high sulfur fuel. This reserve is also particularly useful in engines with very low oil consumption or operating at such low temperatures to promote sulfuric acid condensation
Cladium 400 SAE 30/40	Specifically formulated lubricant for naturally-aspirated or even highly supercharged marine diesel engines, operating on either gasoil, Marine Diesel Oil, Light Fuel Oil (LFO), vegetable oil, or for dual fuel gas engines, according to engine manufacturer's recommendations
Cladium 300 S SAE 30/40	Marine engine oils of the latest generation intended for use in those modern four-stroke diesel engines operating with high-sulphur fuels which require lubricants of higher performances, namely with "anti black sludge" properties. This lubricant provides also better deposit control in the hottest parts of the engine, namely in the piston cooling gallery.
Cladium 400 S SAE 30/40	Lubricant for use in 4-stroke diesel engines that operate on residual fuels. The product is specifically designed for diesel engines, which form significant amounts of acid mist versus a low power or stop-and-go activities. Good water separation features enable efficient separation of water that enters the engine by mistake.
Cladium 500 S SAE 40	Lubricating oil for diesel engines, both with and without turbo charging, under the most severe conditions which are subject to precipitation or have excessive wear because of their design or available fuel. Suitable as motor oil in large crosshead engines with oil-cooled pistons.

Engine oils for other on board applications

To complete the line for the marine sector, Eni provides a line of lubricants to satisfy further lubricating needs in engines for special on board applications, such as life and rescue boats and auxiliary and emergency generators. The most important products are:

i-Sigma Top 10W-40

ACEA E4, E7 API CF Volvo VDS-3 MTU type 3 MAN M 3277 DAF Extended Drain Cummins CES 20072 Voith Retarder Oil Class A MB-Approval 228.5 Renault RVI RLD-2 ZF TE-ML 04C MACK EO-N Scania LDF-3 Deutz DOC III-10 10W-40 gradation enables Eni i-Sigma top 10W-40 to be suitable for any weather condition allowing easy cold starting. Eni i-Sigma top 10W-40 is officially approved or meets the requirements of the service specifications of most manufacturers particularly for Scania engines. The large percentage of additives adopted enables very long life between oil drains and the product is also indicated in case of discontinuous engine operation.

i-Sigma Performance E7 15W-40

ACEA E7, E5, E3, B3 API CI-4/CH-4/SL MB-Approval 228.3 Deutz DQC III-05 MAN M 3275-1 MTU type 2 Volvo VDS-3 MACK EO-N Deutz DQC III-10 Cat ECF-1a, EFC-2 Pensitik BVI PL Da2 Long-drain multigrade oil for diesel engines operating under severe duty. The superior quality of the base stock and the large percentage of additives used enable very long life in service. The oil can also be used, with a wide margin of quality, in previous generation diesel engines installed in vehicles engaged on urban and short-haul goods and passenger service.

i-Sigma Performance E3 15W-40

ACEA E3 API CG-4 MB 228.1 MAN M 3275-1 MTU type 2

Its detergent-dispersant properties, combined with its very high, long-lasting ability to neutralize acidic products of combustion, confirmed by the compliance with requirements of ACEA E5, E3, B3 e API service CH-4, SJ, keep pistons exceptionally clean, while solid combustion products are held in suspension, thus preventing the formation of harmful crankcase deposits.

i-Sigma Universal 15W-40

API CG-4/SL ACEA E2, A3/B3-04 MB 228.7 229.1 MAN 271 S.H.P.D. multigrade long oil-drain engine lubricant suitable for the lubrication of supercharged diesel engines operating under severe duty; it is also suitable for the lubrication of all gasoline car engines, either naturally aspirated or turbocharged, thus offering an ideal choice for the lubrication of mixed fleets.

The superior quality of the base stock used and the large percentage of additives adopted enable long drainage intervals.





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