

eni is a major integrated energy company, committed to growth in the activities of finding, producing, transporting, transforming and marketing oil and gas.

eni is an integrated company that operates across the entire energy chain, employing some 78,000 people in 90 countries around the world. Scientific research and technological innovation are at the heart of its strategies for sustainable development. Founded sixty years ago, eni today, more than ever, is an open and dynamic company. Its key values are sustainability, culture, partnership, innovation and efficiency, which are communicated across the world by a symbol, the six-legged dog.

ent is the leading operator in refining and marketing of petroleum products in Italy. It holds interests in some refining poles in Europe and is engaged in retail and wholesales activities in Central-Eastern European countries.

ent has always been involved in the research and production of high performance motor oils for all types of engines. The huge and well-structured range of eni products is made up of lubricants specially formulated to meet the needs of all kinds of vehicles in all different conditions of roads and climate providing the best answer to drivers' needs.



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motor oils

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 particulate filters.

—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 compact 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.





eni i-Sint lubricants pass the most severe tests included in specifications issued by international bodies (API and ACEA) and car manufacturers thus ensuring maximum engine performance and protection; the

cor manufacturers thus ensuring maximum engine performance and protection; the range includes oils with special additive systems (Mid and Low SAPS, acronym for Sulphated Ash, Phosporus, Sulphur) that do not adversely affect the efficiency and service life of particulate filters (eco-friendly) also included are very low viscosity oils which, when allowed by the engine manufacturer, improve fuel economy.

The extensive range of engine oils in this family not only included products of modern technology, satisfying the requirements of the latest developments in engine design but also products based on known technology, such as eni i-Sint 10W-40, for use in more traditional engines.





eni i-Sint



I-Sin

OW-20 API SN, ILSAC GF-5 synthetic technology

5W-30

top synthetic technology

ACEA C3, VW 504 00 + 507 00, MB Approval 229.51, BMW-LL-04, Porsche C30

exhaust gas after treatment systems

cold start fuel lubrication econ multi OEM: oil drain interval

666

exhaust gas cold start after treatment lubrication sustems

fuel econom multi OEMs*

oil drain interval

systems compability

A

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intervai

0W-40

top synthetic technology

ACEA A3/B4, API SN, MB Approval 229.5, Volkswagen 502 00 + 505 00, BMW LongLife 01, Porsche A 40 Repault RN 0700 0710

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FE 5W-30

ACEA C2, API SN, meets FIAT 9.55535 S1 synthetic technology

exhaust gas after treatment systems compability

cold start lubrication fuel

multi OEMs* oil drain interval exhaust gas after treatment systems

cold start lubrication fuel econor multi OEMs* oil drain interval

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eni i-Sint



MS 5W-30

ACEA C3, API SN, MB Approval 229.51, VW 502 00+505 01. BMW LL-04, meets GM dexos 2

synthetic technologu 5W-40 synthetic technologu

ACEA A3/B4, API SM, VW 502 00 + 505 00, MB Approval 229.3, BMW LL01, GM LL-B-025, Porsche A40, RENAULT RN 0700, 0710

cold start fuel

multi

oil drain exhaust gas cold start fuel multi oil drain

.... ...

eni i-Sint

MS 5W-40

ACEA C3, API SN, MB Approval 229.51, VW 502 00 + 505 01. BMW-LL-04. Porsche A40

synthetic technologu

10W-40

sunthetic technologu

ACEA A3/B4, API SN/CF, VW 502 00 + 505 00, MB Approval 229.3

exhaust gas

4666

666



What is the difference between "synthetic technology" and "top synthetic technology" shown in the i-Sint line lubricants?

The difference is in the technology of the base oils used. In both cases base oils derive from synthesis and chemical transformation processes, which are essential to meet certain performance levels; in "top synthetic technology" products, better quality synthetic base oils are used, which makes it possible to formulate even better "top" performance lubricants.



eni i-Sint tech

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 tech



0W-30

VW 503 00 + 506 00 + 506 01 ACEA A5/B5-04

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, JASO DL-1

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

Ford WSS-M2C 948B, ACEA A1/B1, API SN

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

G 5W-30

GM LL-A-025, GM LL-B-025, ACEA A3/B4-04, API SL/CF

Synthetic technology lubricant designed for General Motors engines. Very high cold starting qualities

R 5W-30

Renault RN 0720 MB 229.51, 226.51 ACEA C4

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

Ford WSS-M2C 913D, ACEA A1/B1, A5/B5, API SL/CF, Renault RN 0700 Synthetic technology lubricant designed for Ford engines. Very high cold start and fuel economy qualities

P 5W-30

PSA B71 2290, ACEA C2, API SN

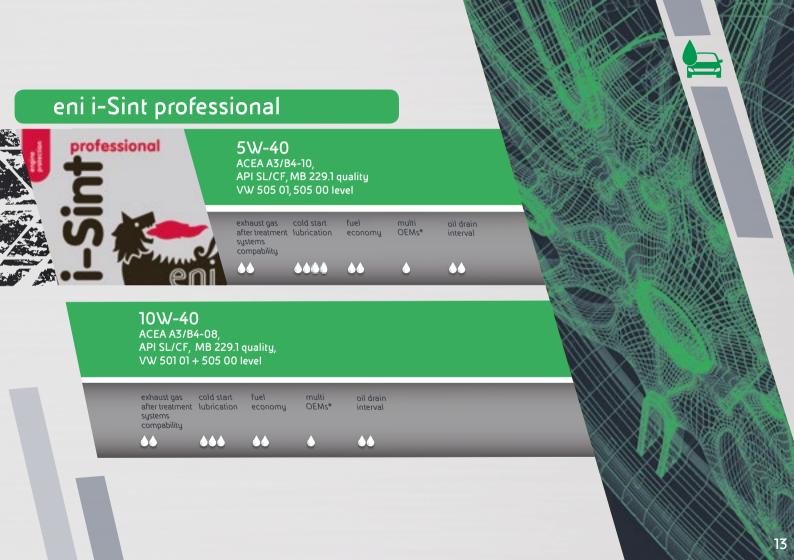
Synthetic technology lubricant specific for Peugeot and Citroën engines. Extremely high compatibility with after-treatment system, very high cold starting properties and fuel economu

eni i-Sint professional

The line is 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.





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.

eni i-Base professional 15W-40

API SJ/CF

eni i-Base 15W-40

ACEA A3/ B4-10; API SL/CF; VW 501 01 + 505 00; MB 229.1 quality



eni i-Base



professional 15W-40

15W-40 MB 229.1 quality, VW 505 01, 505 00 level

e e		after treatment systems compability	lubrication	economy	OEMs*	interval	after treatment systems compability	lubrication	economy	OEMs*	interval
_	eni	66	666	••	•	66	•	•	•	•	66

What are the ACEA levels for light duty vehicles?

ACEA specifications comprise 3 categories classified as A/B, C and E.

The A/B category relates to lubricants for light-duty vehicles both gasoline and diesel; the C (Catalyst Compatible) category is for new generation passenger car engines equipped with exhaust gas after-treatment systems. Lubricants meeting ACEA C specification have limited chemical components that may reduce the efficiency of catalutic converters (mid/low SAPS -Sulphated Ash, Phosphorus, Sulphur- content). The E category is for heavy-duty diesel engine oils. Each category contains sub-categories which reflect different performance requirements based on motor and laboratory testing to stand and with chemical-physical features to respect.

	light duty engines	catalyst compatible oils	heavy duty engines*	
	A1/B1	C1	E4	
	A3/B3	C2	E6	
	A3/B4	C3	E7	
3	A5/B5	C4	E9	

*mid/low SAPS

For a correct selection of the performance levels always refer to the instructions in the vehicle's maintenance guide. ACEA specifications are constantly being updated and significant differences could be found from one edition to the following one. For this reason the year should be reported next to the specification (e.g. A3/B4-04); if not reported it refers conventionally to the latest issued. (the above is to be used as a guideline only) 15

transmission oils

eni Rotra

eni lubricants for car transmissions are designed to meet the main application needs for gearboxes and differentials used in manual or automatic transmission systems.

The use of selected components allows the lubricant to offer a high protection on gears, in particular those subject to extreme loads, and to maintain performance for many kilometres.

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





eni Rotra for lubrication of gearboxes and differentials used in manual transmission systems

eni Rotra



80W-90

API GL-1, API GL-3, FIAT 9.55550 For mildly loaded gearboxes without hypoid type gears

HY DB 80W

API GL-4 MIL-L-2105 MB 235.1 ZF TE-ML 2B, 17A Liebherr Cranes E.P. oil for gearboxes and axles with hupoid gears

85W-140

API GL-1 API GL-3 FIAT 9.55550 For mildly loaded gearboxes without hypoid type gears

HY DB SYNTH 75W-90

API GL-4 MB 235.11 MAN 341 Typ MB ZF TE-ML 8

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

MP 80W-90

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

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

MP/DB 85W-90

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

MP/S 85W-90

API GL-5 FORD M2C-154A FORD M2C-105A MIL-L-2105D 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)

MP 75W-80

API GL-5

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

Hy 80W-90

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

E.P. oil for highly loaded gears

FE 75W-80

API GL-4+ ZF TE-ML 17A level

Synthetic technology with EP (Extreme Pressure) performance. Optimal characteristics for cold climates

FE 75W-90

API GL-4+ VW 501.50 (G 50)

Synthetic technology with EP (Extreme Pressure) performance. Optimal characteristics for cold climates

MP 85W-140

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

E.P. oil for heavily loaded hypoid gears operating under high temperatures

LSX 75W-90

API GL4 GL5 MT-1 MAN 3343 Type S MAN 341 Typ E3 Z2 MAN 342 Typ M3 MAN 342 S1 level 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

Top synthetic technology, high performance oil for heavily loaded gearboxes and axles, allows extended oil drain intervals



eni Rotra ATF for lubrication of automatic transmission systems

eni Rotra ATF



ATF II D

GM Dexron II D FORD MERCON ALLISON C4 MB 236.6 level MAN 339 typ V1 MAN 339 typ Z1 level ZF TE-ML 03D,04D,09,11A,14A, 17C level VOITH H55.6335 (G607) MASERATI BMW RENK DOROMAT Vickers 35VQ25 Liebherr Cranes

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

ATF II E

GM Dexron II E FORD MERCON ALLISON C4 CAT TO-2 MB 236.9 level MAN 339 typ V2, Z2 level ZF TE-ML 14B, 14C level VOITH H55.6336 (G 1363) (Diwa and Midimat Transmissions) VOLVO 97355

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

ATF III

GM Dexron III G FORD MERCON ALLISON C4 M.B. 236.1 MAN 339 typ V1, Z1 level VOITH 55.6335 (G 607, Diwa and Midimat Transmissions) ZF TE-ML 04D, 11B, 14A VOLVO 97341

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

ATF VI

GM Dexron VI FORD MERCON LV JASO 1-A AISIN WARNER AW-1 HONDA DW-1JWS 3324 HYUNDAY/KIA SP-IV HYUNDAY NWS-9638 MITSUBISHI SP-IV MITSUBISHI ATF-J2 NISSAN MATIC S SAAB 93 165 147 TOYOTA WS

Top synthetic oil for latest technology automatic transmissions, featuring an exeptional low viscosity at low temperatures

ATF MULTI

GM Dexron III H ALLISON TES-295 FORD MERCON V MAN 339 Typ V1, Z2 MB-Approval 236.9 MB 236.3, 236.5, 236.6, 236.7, 236.10, 236.10 BMW LT 71141, LA 2634, ETL 7045, 8072B VW G 052 025 G 052 990 ZF 03D, 04D, 14B, 17C VOLVO Std 1273,4 AISIN JWS 3309 CHRYSLER ATF+4, ATF+4 JASO M315 Type 1A TOYOTA T-III, T-IV NISSAN Matic D, J, K LAND ROVER (N402) HONDA Z1 KIA SP-III SUBARU ATF Plus ATF-HP MAZDA ATF M-III M5 JAGUAR Idemitsu K17

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

Is the same lubricant allowed to be used for manual and automatic transmissions?

Automatic transmissions are very complex systems where the lubricant must provide a number of functions that greatly differ from each other: activate the torque converter, protect engaged gears, provide the correct friction characteristics in the multidisc clutches, and hydraulically activate the gearshift. The lubricant in an automatic transmission is normally subject to higher temperatures than in manual systems thus very high thermal-oxidation stress occurs which only a specifically formulated lubricant (called 'ATF': 'Automatic Transmission Fluid') can effectively fight.



Why is the viscosity grade given for manual transmission lubricants and not for ATFs?

Similarly as for engine oils, the SAE (Society of Automotive Engineers) assigns a viscosity grade for transmission lubricants based on viscosity values measured at high (100 °C) and low temperature. The most frequent include 80W-90, 75W-90 and 85W-140. Since the viscosity of all ATFs is very similar and is not representing a significant distinctive feature, the indication of the viscosity grade is usually omitted.

ATF DCT Fluid

VW TL521 82 VW G 052 529 BMW EU 83 22 2 148 578,83 22 2 148 579

High performance full synthetic long life ATF designed for latest generation DCT transmission of the VAG group

ATF MB GT

MB 236.15

Full-synthetic oil applicable for automatic transmission where a MB 236.15 specification is recommended

ATF MB

Allison C4, MB 236.2/236.6/236.7/236.8/236.9/236.91, MB 236.10/236.11/236.12/236.14, Chrysler ATF+3, GM Dexron II/IID/IIIG/IIIH, Ford WSS-M2C922-A1, Honda Z-1, Hyunday/KIA SP-II/SP-III, Isuzu ATF II/III, Jaguar JLM 202238/20292/21044, JASO Tp 1A, Mazda M-III/Type T-IV, Mitsubishi SP-II/SP-III/ATF-J2, Nissan MATIC D/J/K/W, Subaru ATF/ATF HP, Suzuki ATF 3314/3317, Toyota Type DII/T/T-III/T-IV, VAG G-055-024/G-052-162, Volvo 1161540

Full-synthetic oil applicable for automatic transmission where a MB 236.12 specification is recommended

coolants

eni Antifreeze

eni Antifronze products are ideal for use in the most modern vehicles since they help guarantee an effective coolant action for engines, including very high-powered engines; it also offers maximum protection against corrosion.

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

- eni Antifreeze Extra BX
- eni Antifreeze Plus BX
 - eni Antifreeze Spezial BX





eni Antifreeze



Extra Ready BX

CUNA NC 956-16 (ed. '12) BS 6580 AFNOR NFR 15-601 UNE26-361-88/1

• Pre-mix silicate based coolant

Plus BX

VW TL 774 C, MAN 324 Typ NF, MB 325.0, NATO S-759, ASTM D 3306, BMW, OPEL, VOLVO, MASERATI

Concentrate coolant with protective action, suitable for prolonged drain intervals

Plus Ready BX

VW TL 774 C, MAN 324 Typ NF, MB 325.0, NATO S-759, ASTM D 3306, BMW, OPEL, VOLVO, MASERATI

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

Spezial BX

VW TL 774 D/F (G12/G12+), MAN 324 Typ SNF, MB 325.3, NATO S-759, ASTM D 3306, BS 6580, FORD WSS-M97B44-D, DEUTZ 0199-99-1115/2091, OPEL GM 6277M, RENAULT 41-01-001/Q Type D, FW Heft R443, O-Norm V 5123

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

Spezial Ready BX

VŴ TL774 D/F (G12/G12+), MAN 324 Typ SNF, MB 325.3, NATO S-759, ASTM D 3306, BS 6580, FORD WSS-M97B44-D, DEUTZ 0199-99-1115/2091, OPEL GM 6277M, RENAULT 41-01-001/Q Type D, FW Heft R443, O-Norm V 5123

Pre-mix coolant with fully organic technology (O.A.T.), protective action and 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 enviromentally friendly additives.

Spezial J BX VW TL 774 j (G13)

· Concentrate coolant with lobrid technology, Specially developed for the new generation of VAG engines,

Spezial J Ready BX

VW TL 774 j (G13)

· Pre-mix coolant with lobrid technology. Specially developed for the new generation of VAG engines.

Coolant or 'antifreeze'?

Car cooling systems are designed to remove the heat produced by internal combustion in the engine ensuring correct operation in all seasons and load conditions without altering or damaging its components. The system is a closed circuit containing a liquid that transfers heat from hot parts (engine) to the cool area (radiator) and, in order to prevent serious damage to the engine and cooling system, must withstand freezing at low temperatures and boiling at temperatures over 100 °C.

Although this definition has steadily become of common use, giving coolant the name 'antifreeze' is restrictive since it only underlines one of the many characteristics that a good coolant must possess.

Its functions are various, indeed: to protect the circuit from corrosion; to prevent formation of deposits, to inhibit wear (cavitation) damaging the pump; to be compatible with hardness of the dilution water used to prevent precipitation of solids; to guarantee chemical compatibility not just with the metallic materials but also with the seals and rubber materials in general.



Brake fluids

eni Brake fluid

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 FMVSS 116 standard adopted by all OEM's.

eni Brake fluid DOT 4
eni Brake fluid DOT 51





eni Brake fluid



DOT 4 FMVSS 116 (DOT 3), SAE J 170

DOT 5.1 FMVSS 116 (DOT 5.1), SAE J 1703

Why is brake fluid important and what is it used for in a car?

The braking system is one of the most important parts for ensuring the safety of a car: it must have high reliability and able to operate fast and do so with maximum efficiency.

The systems is a closed circuits filled with a specific liquid, whose function is to transmit the impulse of the braking action given by the driver to the brake pedal. The brake fluid is pressurized in the circuit causing the brake cylinders to operate the brake calipers thus slowing down or stopping the car.

In the case of high speed, racing, long hill descents or heavy loads, intense and prolonged braking can occur: consequently the braking circuit and brake fluid are subject to significant increase in temperature. Therefore, one of the main properties of the brake fluid is to have a high boiling point value to prevent the formation of vapour under these conditions. As bubbles of gas or air can be compressed, they inhibit the propagation of the braking force causing the braking action to fail. Further properties of the fluid include compatibility with the materials of the braking circuit, notably the seals, and resistance to the oxidation processes that could affect performance and equipment durability.

subsidiary products

eni LHM Super

special hydraulic fluid formulated for power-steering systems, suspensions and and brake systems of Citroën vehicles but also suitable for those applications where manufacturer recommends the use of an LHM type product. It provides a high and long lasting protection against the corrosion of the hydraulic systems even in rigid temperature conditions.

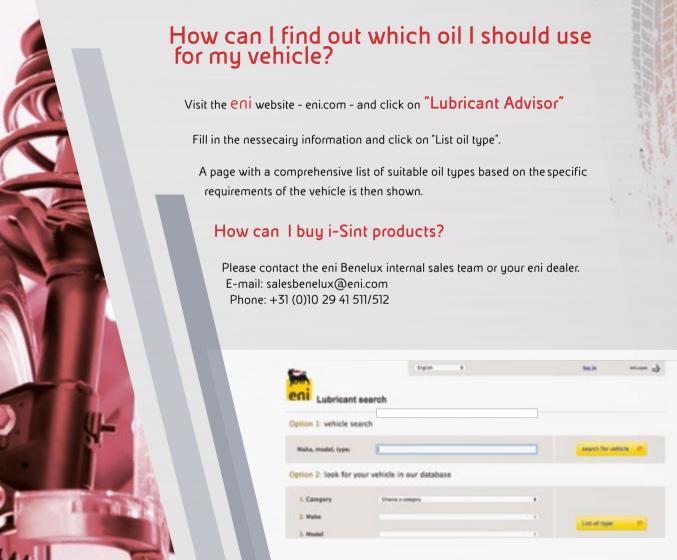
 Grease MU, Grease MU EP, Grease LC and Grease SM products range of high quality level for different and long lasting applications, very high protection;

• Grease LCX and Grease MSX 2/460 a new range of synthetic greases for high temperature, suitable for extreme operation conditions.

eni CHF

special synthetic fluid designed for power-steering systems, leveling systems, suspensions of those vehicles where the manufacturer recommends the use of a CHF type synthetic fluid. It protects effectively against corrosion and owing to its high oxidation stability it provides long lasting performance even in rigid temperature conditions.





10 reasons why with eni

sustainability
Respectful use of resources, be it people be it the environment.

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

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.

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. production cycle

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



research & development More than 200 employees in research and development including the collaboration

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.

Our personal mission is listen, understand and fulfil our customers' needs, hence involve them

in our decision making process.

service

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

made in Italy

Italy's well renown tradition
and culture of design to impro-

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.

