

Lubricants guide for motor vehicles





TOTAL

TOTAL LUBRIFIANTS:



TOTAL ranks in fifth place among listed global international integrated oil and gas groups* with nearly 100,000 employees on five continents. The group develops its expertise at every level of industry: hydrocarbon exploration and production, the gas downstream industry, the refining and marketing of petroleum products, plus the trade and marine transport of those same products. TOTAL is also a major actor in the chemical industry, in which it is a world leader.

TOTAL Lubrifiants, a subsidiary of Total, produces and markets lubricating oils and products for other applications (grease, fluid, coolants, etc.) under its Total brand in 150 countries and many sectors: cars, motorcycles, transport, agriculture, fisheries, river and recreational navigation, public works, naval forces, aviation and industrial specialities.

TOTAL Lubrifiants mobilizes 110 researchers in its two research centres to cover all these applications.

* Based on market capitalization (in US dollars) as of 31 December 2010.

AN INTERNATIONAL DIMENSION

Innovative products, a service-focused strategy

Innovation has always been the priority for TOTAL Lubrifiants, which can count on its research centres. The professionalism of our researchers and their constant efforts make it possible to design and develop cutting-edge products and solutions.

Protection of the environment

The engineers of TOTAL Lubrifiants design products with sustainable development in mind in order to reduce the consumption of fuel and emissions of exhaust gases and particles.

Partnerships with vehicle manufacturers

Lubricants must constantly stay ahead of technological change, adjust to international specifications and meet industrial requirements. The partnerships built up by TOTAL Lubrifiants with international manufacturers such as Renault-Nissan, PSA Peugeot-Citroën, Mazda, Kia or Claas are a direction contribution to this.

Products for champions

TOTAL Lubrifiants is a significant player in the field of mechanical sports (Formula 1, World Rally Championship, MotoGP, Endurance and Rally Raid), supplying race teams and organizers with products and services of exceptional quality. The expertise developed for competitions guarantees drivers optimized "protection, reliability and performance" for their engines. This is because racing is an unrivalled experimental laboratory for the development of tomorrow's consumer products.

The objectives of the catalogue

This catalogue provides you with an overview of the expertise and skills of TOTAL Lubrifiants. It presents, sector by sector, products that have been specially developed to meet the needs of all applications.

Product choice must comply with the manufacturer's recommendations as indicated in the owner's manual. In case of doubt, please contact your TOTAL representative or usual garage. The specifications contained in this catalogue are those in force at the date of printing (August 2011).

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THE PROFESSIONAL MARKET

(lubricants for engines and transmissions)



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ON-ROAD

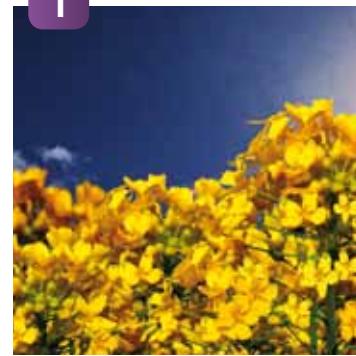
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CROSS-CATEGORY PRODUCTS

(all segments)

Biolubricants
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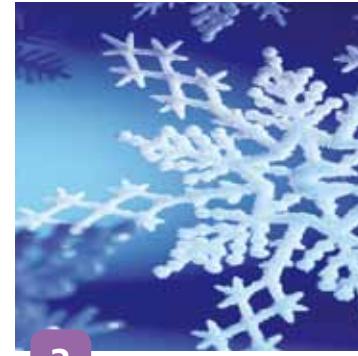


Greases
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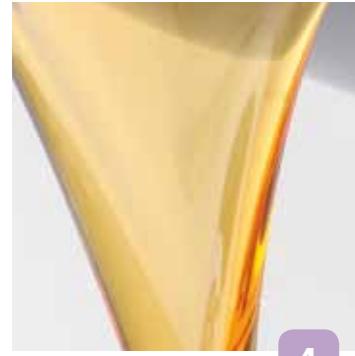


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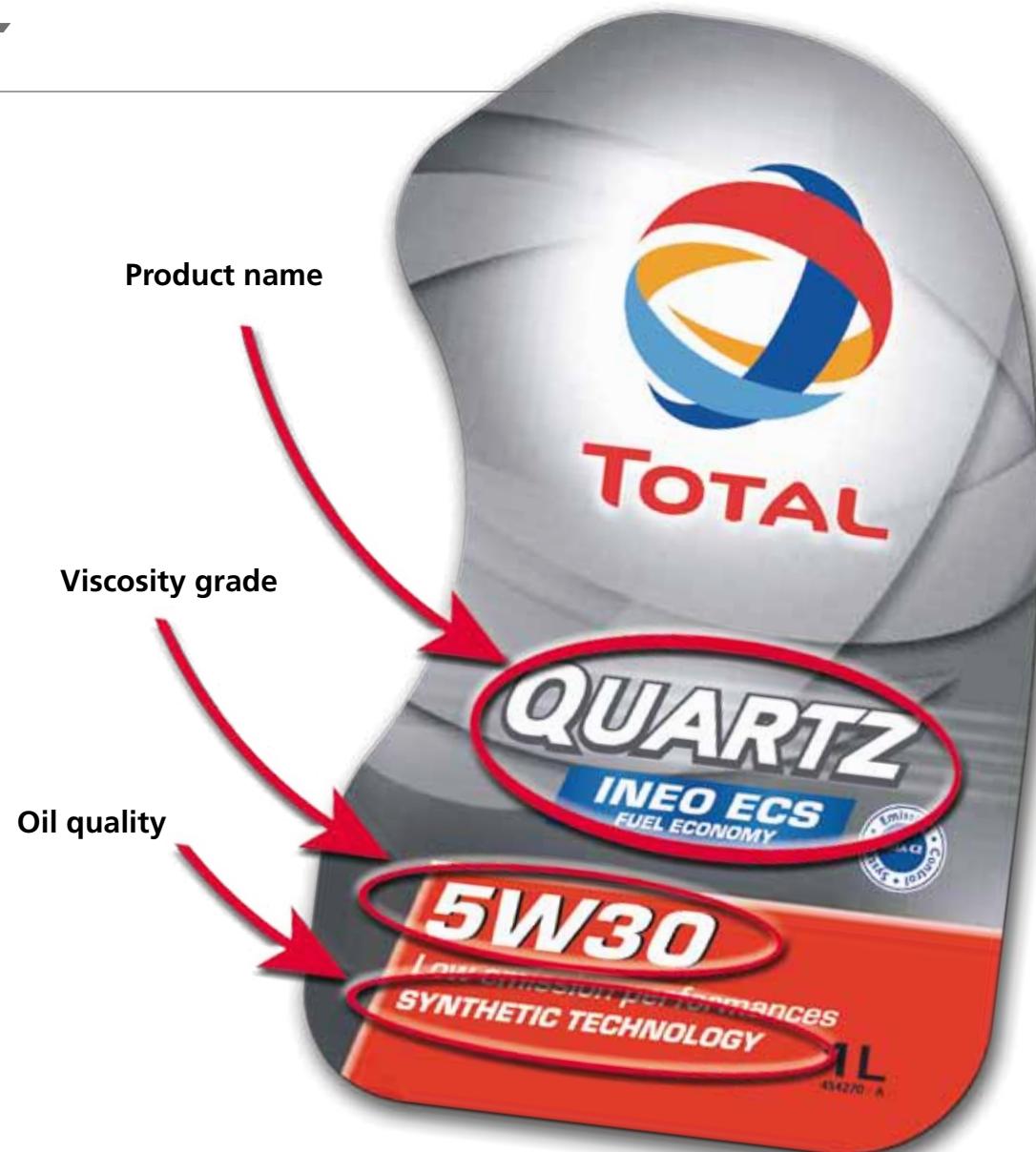
THE KEY CHARACTERISTICS OF A LUBRICANT

Our research teams take great care to develop high-quality lubricants. They meet international standards as well as vehicle manufacturers' even more stringent approval.

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The quality of a lubricant is defined by a number of parameters to be found on the label. These indications enable you to assess the properties and level of performance offered by the lubricant.

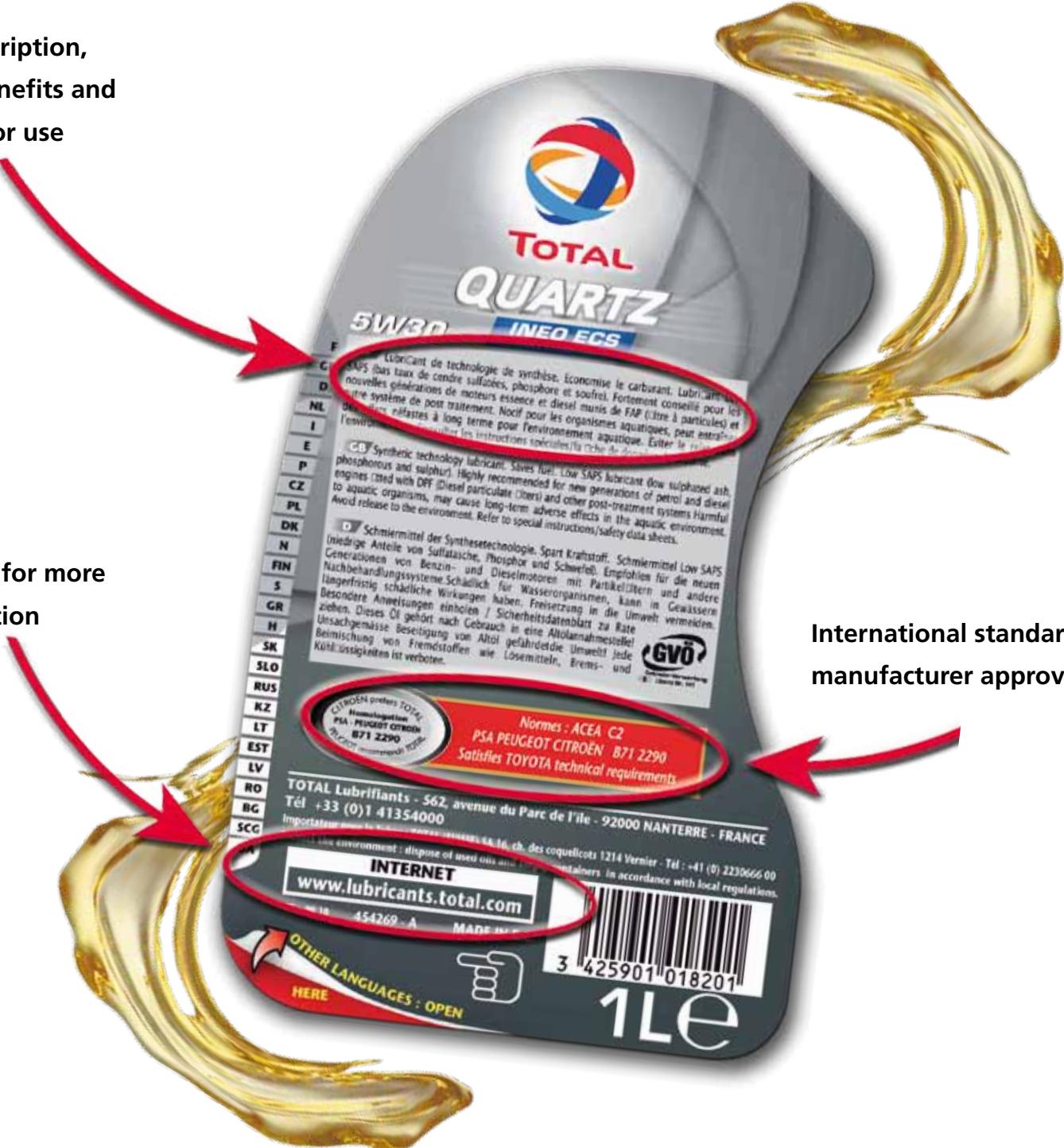
These are the main items of information on the label that will help you choose the best lubricant for your needs.

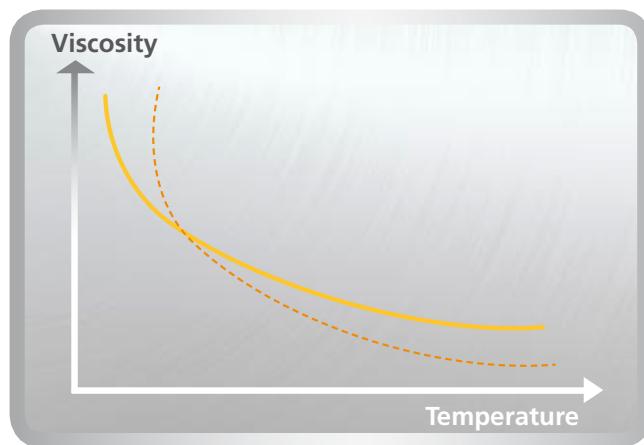


Product description,
customer benefits and
conditions for use

Website for more
information

International standards,
manufacturer approvals





1/ OIL VISCOSITY

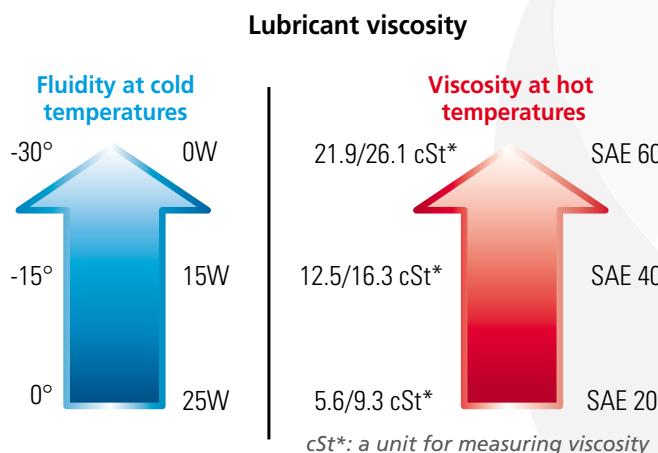
Lubricants behave differently at high and low temperatures.

Oil can in effect be characterized by its viscosity, flow resistance or by measuring the thickness of the oil film. Viscosity varies according to temperature in the following manner:

The higher the temperature, the more fluid the oil and the lower its viscosity.

This means is that if the engine is to perform at its best, the oil must be able to retain its viscosity whatever the heat conditions: it must **stay fluid at cold temperatures** (to allow the engine to start) and **it must be viscous at hot temperatures** (to stop the various moving parts coming into contact with each other).

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The lower the viscosity at cold temperatures, the more fluid the oil is at low temperatures and can be pumped more easily.

The higher the viscosity at hot temperatures, the more viscous the oil is.

2/ OIL GRADES

The SAE (Society of Automotive Engineers) has created a classification for lubricant grades in order to characterize viscosity at high and low temperatures.

The grades are made up of two numbers, between which is the letter W (for Winter grade), as follows:



xx Indicates viscosity at cold temperatures
(measured at different temperatures)

yy Indicates viscosity at hot temperatures
(only measured at 100°C).

3/ CHARACTERISTICS



→ **Fuel Economy lubricants**

These lubricants are based on a special formula that helps save fuel compared with conventional oils offering the same level of performance.

This characteristic applies essentially to engine oil, but it can also relate to transmission oils for gearboxes, axles, etc.

For more information:

www.total-lubrifiants-fuel-economy.com



→ **Low SAPS lubricants**

These lubricants contain low levels of sulphated ash, phosphorus and sulphur. This technology optimizes the operation of the depolluting systems fitted to the most recent engines.

4/ SPECIFICATIONS

In order to guarantee high levels of technical performance, our products meet the demands of **ACEA, API, JASO and ILSAC international standards** as required.

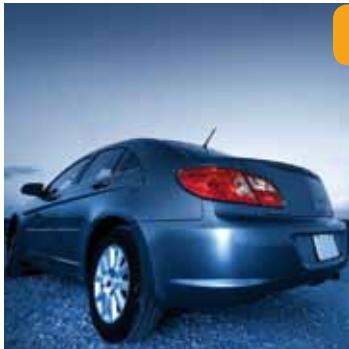
In addition to this, some vehicle manufacturers lay down **approval standards** aimed at optimizing the performance of their engines. These are more stringent than the international standards. Such manufacturers recommend the use of a specific oil (refer to the vehicle owner's manual). TOTAL can offer complete product ranges approved by the most demanding manufacturers.



**Find this information
in the catalogue!**
It will help you explore
the whole of
our product range.

THE CONSUMER MARKET

(lubricants for engines and transmissions)



1

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THE TOTAL QUARTZ RANGE

→ THE LUBRICANTS IN THE TOTAL RANGE FOR PASSENGER CARS ARE KEY TO THE LIFE OF YOUR ENGINE.

TOTAL QUARTZ lubricants contain three main components: the first is the base oil. Its composition and properties vary according to how demanding the requirements are to be met by the four product ranges, TOTAL QUARTZ 5000, TOTAL QUARTZ 7000, TOTAL QUARTZ 9000 and TOTAL QUARTZ INEO. The original properties of the base oil are radically enhanced by adding two other components: polymers and performance additives.





► **THE VARIOUS FUNCTIONS OF LUBRICANTS ARE FUNDAMENTAL TO ENSURING THAT YOUR ENGINE STAYS IN GOOD CONDITION:**

- They protect it against all the causes of wear by reducing friction and corrosion,
- They prevent your engine from overheating,
- They ensure good cylinder compression and maximum engine efficiency,
- They ensure that your engine is clean by preventing the deposit of various impurities.



Some lubricants in the TOTAL QUARTZ range go further than this, helping you to:

- **Save on fuel consumption,**
- **Protect the post-treatment systems fitted to the most recent engine systems.**

The TOTAL QUARTZ range meets all of the above requirements and helps optimize the operation of your engine. It is supplemented by the TOTAL CLASSIC range, which is strictly compliant with the most recent international standards.



1/ PASSENGER CARS

QUARTZ: SUB-RANGES

TOTAL QUARTZ INEO The reference among anti-pollution products 		<ul style="list-style-type: none">The TOTAL QUARTZ INEO range comprises synthetic technology lubricants with formulas optimized to reduce SAPS content*. The performance obtained is at the highest level currently available. The most demanding vehicle manufacturers recommend the use of TOTAL QUARTZ INEO engine lubricants irrespective of style of driving or type of use.In addition to offering protection, cleanliness and maximum performance, this range reduces environmental impact. This is because the depollution systems fitted to the most recent engines can operate at maximum capacity and will be able to reduce the emission of pollutants. These post-treatment systems, which are sensitive to the lubricants used and costly to maintain, enjoy long-term protection thanks to special Low SAPS formulas. <p>Advantages:</p> <ul style="list-style-type: none">- A new generation of lubricants for all gasoline and diesel engines- Optimum operation of depollution systems- Reduced car servicing costs for the user- Appropriate for all uses, even the most intensive <p><small>* Low SAPS = Low levels of sulphated ash, phosphorus and sulphur (SAPS).</small></p>
TOTAL QUARTZ 9000 The benefits of synthetic technology 		<ul style="list-style-type: none">The TOTAL QUARTZ 9000 range comprises synthetic technology lubricants. The use of chemical compounds for these formulas makes it possible in particular, to provide improved thermal stability (cold, when starting the engine, and hot, during intensive use) as well as longer life for the oil and maintenance of its properties over time. These lubricants meet the needs of servicing plans with extended oil change intervals. The addition of polymers and special additives ensures that lubricants in the TOTAL QUARTZ 9000 range suit the most demanding applications and totally satisfy all the demands that lubricants may need to meet. <p>Advantages:</p> <ul style="list-style-type: none">- For all types of use, even the most intensive- Greater fluidity when cold for easier starting- Enhanced detergent and anti-oxidant functions for optimum engine cleanliness- Designed for the highest-performing engine technologies: in particular, PSA, Volkswagen, Hyundai-Kia, BMW, Ford, General Motors and Mercedes-Benz

QUARTZ: SUB-RANGES (continued)

TOTAL QUARTZ 7000		<ul style="list-style-type: none">The base oils in the products of the TOTAL QUARTZ 7000 range combine mineral base oils and synthetic base oils. The composition of the selected base oils gives these lubricants special properties (improved fluidity when cold). As for the additives, these give them enhanced detergent and anti-wear properties.Advantages:<ul style="list-style-type: none">- Enhanced engine cleanliness- Engine protection against all forms of wear- Limited oil deterioration between oil changes- Enhanced resistance to temperature variation effects
TOTAL QUARTZ 5000		<ul style="list-style-type: none">The TOTAL QUARTZ 5000 range of lubricants is formulated using mineral base oils to which additives and polymers are added.The technical qualities of TOTAL QUARTZ 5000 lubricants suit them for standard types of use.Advantages:<ul style="list-style-type: none">- Protection against engine wear- Prevents fouling of vulnerable moving parts

CLASSIC: RANGE SUPPLEMENT

TOTAL CLASSIC		<ul style="list-style-type: none">The lubricants in the TOTAL CLASSIC range are totally compliant with international standards. The additives have been selected with care in order to provide excellent performance and to meet the requirements of ACEA, API and ILSAC test sequences.
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FOCUS

TOTAL QUARTZ INEO MC3 5W-30

Synthetic technology

NEW FORMULA
Low SAPSACEA C3 2008
API SM/CF

- MB-Approval 229.51 and backward compatibility with MB-Approval 229.31
- BMW LL-04 • VW 502.00/505.01
- Performance level: HYUNDAI-KIA and GM



► REDUCED ENVIRONMENTAL IMPACT

TOTAL QUARTZ INEO MC3 New formula 2011 optimizes the operation of three-way catalytic converters and Diesel Particulate Filters (DPF), thus reducing emissions of Nox, CO₂ and CO. It guarantees adherence both to the levels of performance claimed by manufacturers and to environmental standards.

► LONG LIFE FOR POST-TREATMENT SYSTEMS

TOTAL QUARTZ INEO MC3 prolongs the life of post-treatment systems by preventing the clogging of particulate filters and the fouling of three-way catalytic converters.

► PROTECTION AND CLEANLINESS

Its excellent resistance to temperature variations guarantees the longevity of engine parts and optimal performance levels under all circumstances.

► EXTENDED OIL CHANGE INTERVALS

TOTAL QUARTZ INEO MC3 meets the requirements of the most stringent manufacturers' servicing programmes by permitting extra-long oil change intervals (20,000 to 40,000 km)*.

* We recommend that you refer in all cases to the owner's manual for your vehicle.



THE TOTAL QUARTZ INEO RANGE

(synthetic technology oils)



NEW

TOTAL QUARTZ INEO MC3

5W-30

		SPECIFICATIONS		MANUFACTURER APPROVALS	
		Fuel ECO	Low SAPS		
TOTAL QUARTZ INEO MC3	5W-30		●	ACEA C3 API SM/CF	<ul style="list-style-type: none"> MB-Approval 229.51 and backward compatibility with MB-Approval 229.31 BMW LL-04 VW 502.00/505.01 Meets the requirements of Hyundai-Kia and General Motors
TOTAL QUARTZ INEO ECS		●	●	ACEA C2	<ul style="list-style-type: none"> PSA Peugeot / Citroën B71 2290 Meets the requirements of Toyota
TOTAL QUARTZ INEO DL1		●	●	JASO DL-1 ACEA C2	
TOTAL QUARTZ INEO LONGLIFE			●	ACEA C3	<ul style="list-style-type: none"> VW 504.00/507.00 BMW LL-04 MB-Approval 229.51 backward compatibility with MB-Approval 229.31 Porsche C30
TOTAL QUARTZ INEO MC 3	5W-40		●	ACEA C3 API SM/CF	<ul style="list-style-type: none"> MB-Approval 229.51 backward compatibility with MB-Approval 229.31 BMW LL-04 VW 502.00/505.01 Porsche A40 Meets the requirements of Ford WSS-M2C 917-A and Fiat 9.55535-S2

GRADE

STANDARDS

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FOCUS

TOTAL QUARTZ 9000 ENERGY 0W-30

Synthetic technology oils

Fuel Economy

ACEA A3/B4
API SL/CF

- MB-Approval 229.5 and backward compatibility with 229.3 • BMW LL-01
- RN 0700/0710 • VW 502.00/505.00 • Meets the requirements of GM-LL-A/B-025



► REDUCED ENVIRONMENTAL IMPACT

TOTAL QUARTZ 9000 ENERGY 0W-30 provides fuel savings without the need to change your driving habits. A 2.58% saving has in fact been measured in ACEA official testing**. TOTAL QUARTZ 9000 ENERGY 0W-30 is approved and recommended* for Volkswagen, Audi, Seat, Skoda, Mercedes-Benz, Smart, BMW and Mini vehicles, as well as Opel, Chevrolet and Vauxhall.

► EXCEPTIONAL FLUIDITY

Its 0W-30 grade guarantees immediate lubrication of all moving parts in the engine at start-up. This lubricant has been formulated specifically to reduce engine friction, thus improving its energy efficiency and protecting even the most vulnerable engine parts.

* Please refer to the owner's manual for the manufacturer's recommendations for the engine fitted

** M111 FE tests

ENHANCED PROTECTION.



THE TOTAL QUARTZ 9000 RANGE

(synthetic technology oils)



PRODUCT	GRADE	SPECIFICATIONS		MANUFACTURER APPROVALS
		LUBRICANTS Fuel Economy PASSENGER CARS	Fuel ECO	
TOTAL QUARTZ 9000 FUTURE	0W-20		API SM ILSAC GF-4	
TOTAL QUARTZ 9000 FUTURE GF5			API SN ILSAC GF-5	
TOTAL QUARTZ 9000 ENERGY	0W-30		ACEA A3/B4 API SL/CF	<ul style="list-style-type: none">• VW 502.00/505.00• BMW LL-01• MB-Approval 229.5• RN 0700/0710• Meets the requirements of GM-LL-A/B-025
TOTAL QUARTZ 9000 FUTURE GF5			API SN ILSAC GF-5	
TOTAL QUARTZ 9000 FUTURE XT	5W-20		API SN ILSAC GF-5	<ul style="list-style-type: none">• Ford WSS-M2C 945-A• GM 6094M
TOTAL QUARTZ 9000 FUTURE GF5			API SN ILSAC GF-5	

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THE TOTAL QUARTZ 9000 RANGE

(synthetic technology oils - continued)

	GRADE	SPECIFICATIONS	MANUFACTURER APPROVALS	
			STANDARDS	
TOTAL QUARTZ 9000 ENERGY HKS G-310	5W-30		ACEA A5 level API SM level	<ul style="list-style-type: none"> Approved by Hyundai-Kia
TOTAL QUARTZ 9000 ENERGY			ACEA A3/B4 API SL/CF	<ul style="list-style-type: none"> VW 502.00/505.00 MB-Approval 229.5 backward compatibility with MB-Approval 229.3 GM-LL-A/B-025
TOTAL QUARTZ 9000 FUTURE XT		●	API SN ILSAC GF-5	<ul style="list-style-type: none"> Ford WSS-M2C 946-A GM 6094M
TOTAL QUARTZ 9000 FUTURE NFC		●	ACEA A5/B5	<ul style="list-style-type: none"> Ford WSS-M2C 913-C backward compatibility with Ford WSS-M2C 913 B
TOTAL QUARTZ 9000 FUTURE FGC		●	API SN ILSAC GF-5	<ul style="list-style-type: none"> Ford WSS-M2C 946-A Chrysler MS-6395 Meets the most recent requirements and backward compatibility with GM 6094M and GM 4718M
TOTAL QUARTZ 9000 FUTURE GF5		●	API SN ILSAC GF-5	
TOTAL QUARTZ 9000 DID			ACEA C3	<ul style="list-style-type: none"> VW 502.00/505.01



THE TOTAL QUARTZ 9000 RANGE

{synthetic technology oils - continued}

		SPECIFICATIONS	MANUFACTURER APPROVALS	
		Fuel ECO		
TOTAL QUARTZ 9000 ENERGY			ACEA A3/B4 API SM/CF	• VW 502.00/505.00 • MB-Approval 229.5 • BMW LL-01 • Porsche A40
TOTAL QUARTZ 9000 SM		5W-40	API SM	
TOTAL QUARTZ 9000			ACEA A3/B4 API SM/CF	• PSA B71 2296 • VW 502.00/505.00 • MB-Approval 229.3 • BMW LL-01 • Porsche A40
TOTAL QUARTZ 9000 FUTURE XT		10W-30	● API SN ILSAC GF-5	• GM 6094M
TOTAL QUARTZ 9000 FUTURE GF5			● API SN ILSAC GF-5	

GRADE

STANDARDS

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FOCUS

TOTAL QUARTZ 7000 10W-40

Synthetic-based oils

PSA approved

ACEA A3/B4
API SL/CF

- PSA PEUGEOT CITROËN B71 2294 & B71 2300
- VW 501.01/505.00 • MB-Approval 229.1



TOTAL QUARTZ 7000 10W-40 is both an unrivalled reference in its category and universal in terms of applications and engine compatibility. Specifically, it has been approved by Peugeot and Citroën and meets the requirements of Volkswagen, Audi, Seat, Skoda, Mercedes-Benz, Smart, BMW and Mini.

 **ASSURED PROTECTION FOR YOUR ENGINE**

The base oil used in combination with a selection of specially developed additives give TOTAL QUARTZ 7000 10W-40 excellent engine-protecting qualities. It also protects the most vulnerable engine parts against wear (wear on valve train, piston rings, pistons, cylinder sleeves, etc.) and corrosion.

 **ASSURED CLEANLINESS**

TOTAL QUARTZ 7000 10W-40 ensures that your engine stays clean by removing particles (dust and particles) and taking them through to the oil filter.

EFFICIENCY AND HIGH PERFORMANCE.



THE TOTAL QUARTZ 7000 RANGE

(synthetic-based oils)

SPECIFICATIONS



Fuel ECO

MANUFACTURER APPROVALS

PRODUCT	GRADE	SPECIFICATIONS	MANUFACTURER APPROVALS	
			API SN ILSAC GF-5	FORD WSS-M2C 945-A GM 6094M
TOTAL QUARTZ 7000 FUTURE XT	5W-20	●	API SN ILSAC GF-5	Ford WSS-M2C 945-A GM 6094M
TOTAL QUARTZ 7000 FUTURE GF5		●	API SN ILSAC GF-5	
TOTAL QUARTZ 7000 FUTURE GF5	5W-30	●	API SN ILSAC GF-5	
TOTAL QUARTZ 7000 FUTURE XT		●	API SN ILSAC GF-5	Ford WSS-M2C 946-A GM 6094M
TOTAL QUARTZ 7000 FUTURE XT	10W-30	●	API SN ILSAC GF-5	GM 6094M
TOTAL QUARTZ 7000 FUTURE GF5		●	API SN ILSAC GF-5	
TOTAL QUARTZ 7000 ENERGY	10W-40		ACEA A3/B4 API SL/CF	VW 501.01/505.00 MB-Approval 229.1
TOTAL QUARTZ 7000 SM			API SM	
TOTAL QUARTZ 7000			ACEA A3/B4 API SL/CF	VW 501.01/505.00 MB-Approval 229.1 PSA B71 2294 / B 71 2300
TOTAL QUARTZ 7000	15W-50		ACEA A3/B4 API SL/CF	VW 501.01/505.00 MB-Approval 229.1 PSA B17 2294 / B 71 2300
TOTAL QUARTZ 4x4			ACEA A3/B4 API SL/CF	VW 501.01/505.00 MB-Approval 229.1
TOTAL QUARTZ 7000 SM			API SM	

FOCUS

TOTAL QUARTZ 5000 15W-40

Mineral oil

ACEA A3/B3
API SL/CF• PSA PEUGEOT CITROËN B71 2295 • Meets the requirements of
VW 501.00/505.00 and MB-Approval 229.1

TOTAL QUARTZ 5000 15W-40 is a mineral oil-based engine lubricant approved and recommended by Peugeot and Citroën and which meets the requirements of Volkswagen, Audi, Seat, Skoda, Mercedes-Benz, Smart, BMW and Mini.

TOTAL QUARTZ 5000 15W-40 has been developed for gasoline and diesel engines in passenger cars.

TOTAL QUARTZ 5000 15W-40 is suitable for turbocharged engine systems and can be used for city, road or motorway driving in all seasons.

→ **THIS LUBRICANT IS A MULTIGRADE OIL WITH A VERY HIGH VISCOSITY INDEX OFFERING EXCELLENT TEMPERATURE RESISTANCE.**

Its anti-corrosion, anti-rust and anti-foam additives help to ensure optimum engine operation.

ASSURED PROTECTION.



THE TOTAL QUARTZ 5000 RANGE

(mineral oils)

		SPECIFICATIONS	MANUFACTURER APPROVALS	
		Fuel ECO		
TOTAL QUARTZ 5000 FUTURE XT	5W-20	●	API SN ILSAC GF-5	<ul style="list-style-type: none">• Ford WSS-M2C 945-A• GM 6094M
TOTAL QUARTZ 5000 FUTURE XT	5W-30	●	API SN ILSAC GF-5	<ul style="list-style-type: none">• Ford WSS-M2C 946-A• GM 6094M
TOTAL QUARTZ 5000 FUTURE XT	10W-30	●	API SN ILSAC GF-5	<ul style="list-style-type: none">• GM 6094M
TOTAL QUARTZ 5000 SM	15W-40		API SM	
TOTAL QUARTZ 5000 SM	20W-50		API SM	
TOTAL QUARTZ 5000	15W-40		ACEA A3/B3 API SL/CF	<ul style="list-style-type: none">• PSA B71 2295• Meets the requirements of MB-Approval 229.1 and VW 501.01/505.00
TOTAL QUARTZ 5000	20W-50		ACEA A3/B3 API SL/CF	<ul style="list-style-type: none">• PSA B71 2295• Meets the requirements of MB-Approval 229.1 and VW 501.01/505.00
TOTAL QUARTZ 4x4	15W-40		API CI-4/SL	

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FOCUS

TOTAL CLASSIC 5W-40

Synthetic technology

Meets European standards

ACEA A3/B4
API SL/CF

► **TOTAL CLASSIC 5W-40** is a high-quality lubricant that protects engines (especially the valve train) against wear and corrosion.

This product meets the requirements of ACEA A3/B4 and API SL/CF standards.

QUALITY, SIMPLICITY, UNIVERSALITY.



THE TOTAL CLASSIC RANGE

TOTAL CLASSIC C2	5W-30	OIL TYPE	FUEL ECO	LOW SAPS	STANDARDS
			Fuel ECO	Low SAPS	
TOTAL CLASSIC	5W-30	Synthetic technology	●	●	ACEA C2
TOTAL CLASSIC	5W-40	Synthetic technology	●		ACEA A5/B5 API SL/CF
TOTAL CLASSIC	10W-40	Synthetic technology			ACEA A3/B4 API SL/CF
TOTAL CLASSIC	15W-40	Mineral			ACEA A3/B4 API SL/CF
TOTAL CLASSIC	20W-50	Mineral			ACEA A3/B3 API SL/CF

GRADE

SPECIFICATIONS



OILS FOR MANUAL GEARBOXES

		MANUFACTURER APPROVALS
APPLICATION TYPE		
For vehicles built by Peugeot and Citroën and all other vehicles requiring high-performance 75W-80, 75W grade oils	TRANSMISSION BV 75W-80	<ul style="list-style-type: none"> • API GL-4 • PSA B71 2330
For light, utility and off-road vehicles requiring 75W-85, 75W-90 grade oils Suitable for rear axles	TRANSMISSION SYN FE 75W-90	<ul style="list-style-type: none"> • API GL-4/GL-5/MT-1 • SAE J2360 • MB-Approval 235.8 • MACK GO-J • MAN 3343 type S • SCANIA STO 1:0 • ZF TE-ML 02B, 05B, 07A, 12B, 16F, 17B, 19C
For older vehicles	EP 80W-85, 80W-90	<p>Grade 80W-85:</p> <ul style="list-style-type: none"> • API GL-4 • MAN 341 type Z-1 • MB-Approval 235.1 • ZF TE-ML02A, 17A <p>Grade 80W-90:</p> <ul style="list-style-type: none"> • API GL-4 • MAN 341 type Z-1 • ZF TE-ML 02A, 16A, 17A, 19A





TRANSMISSION FLUIDS FOR AUTOMATIC GEARBOXES

		STANDARDS (APPROVAL/LEVEL)
PRODUCT TYPE		
Dexron III H	FLUIDE XLD FE	<ul style="list-style-type: none">• JASO 1A • DEXRON III H • MERCON V <p>Asian makes:</p> <ul style="list-style-type: none">• Nissan Matic D, J, K • Toyota T-IV (JWS 3309) • Mitsubishi SP-II, SP-III• Mazda M-III, M-V • Honda ATF Z-1 • Hyundai Kia SP-II, SP-III <p>European makes:</p> <ul style="list-style-type: none">• MB-Approval 236.11 • ZF TE ML 11B • VW TL 52 162 • BMW LA 2634, LT 71141
Dexron IIIG	FLUIDEMATIC SYN	<p>European makes:</p> <ul style="list-style-type: none">• RENAULT DPO ATs • PSA AL4 ATs • MB-Approval 236.11• ZF TE ML 11B • VW TL 52 162 • BMW LA 2634, LT 71141
	FLUIDE AT 42	<ul style="list-style-type: none">• DEXRON III G• MERCON
	FLUIDE G3	<ul style="list-style-type: none">• DEXRON III G• MERCON
Asian gearbox makes	FLUIDE AT 75	<ul style="list-style-type: none">• JASO 1A • DEXRON III H • MERCON <p>Asian makes:</p> <ul style="list-style-type: none">• Nissan Matic D, J, K • Toyota T-IV (JWS 3309) • Mitsubishi SP-II, SP-III• Mazda M-III, M-V • Honda ATF Z-1 • Hyundai Kia • Subaru <p>European makes:</p> <ul style="list-style-type: none">• MB-Approval 236.11 • ZF TE ML 11B • VW TL 52 162 • BMW LA 2634, LT 71141
CVT	FLUID CVT-MV (CVT for engines under 2 litres)	<ul style="list-style-type: none">• JASO 1A • DEXRON III H • MERCON <p>Asian makes:</p> <ul style="list-style-type: none">• Daihatsu • Honda • Mazda • Mitsubishi • Nissan • Subaru • Suzuki • Toyota, etc.

THE TOTAL MOTORCYCLE RANGE

Not just the engine and gearbox, but also the chain and the fork of a motorcycle need the right lubricants.

► **TOTAL OFFERS A RANGE THAT MEETS THE REQUIREMENTS OF DAILY USE OF ALL TYPES OF TWO-WHEELER AND ALL ENGINE TYPES. THIS RANGE COMPLIES WITH THE MOST STRINGENT INTERNATIONAL STANDARDS.**

The TOTAL range derives directly from research aimed at racing performance and has been validated by major motorcycle manufacturers.



SUB-RANGES

Lubricants for 2-stroke engines		<ul style="list-style-type: none"> A special range for 2-stroke motorcycle and scooter engines.
Lubricants for 4-stroke engines		<ul style="list-style-type: none"> A range developed specifically for 4-stroke engines.

2-STROKE OR 4-STROKE?

In order to choose the right lubricant, it is important to know what type of engine you have. This is because 2-stroke and 4-stroke engines need different oil types due to their different lubrication systems.

■ **Important:** Lubricants for 2-stroke and 4-stroke engines are different and never interchangeable.

	2-stroke engines	4-stroke engines
Number of cycles	2	4
Lubrication type	Lubricant consumed	Lubricant recycled



2/ MOTORCYCLES

► IN THE ENGINE

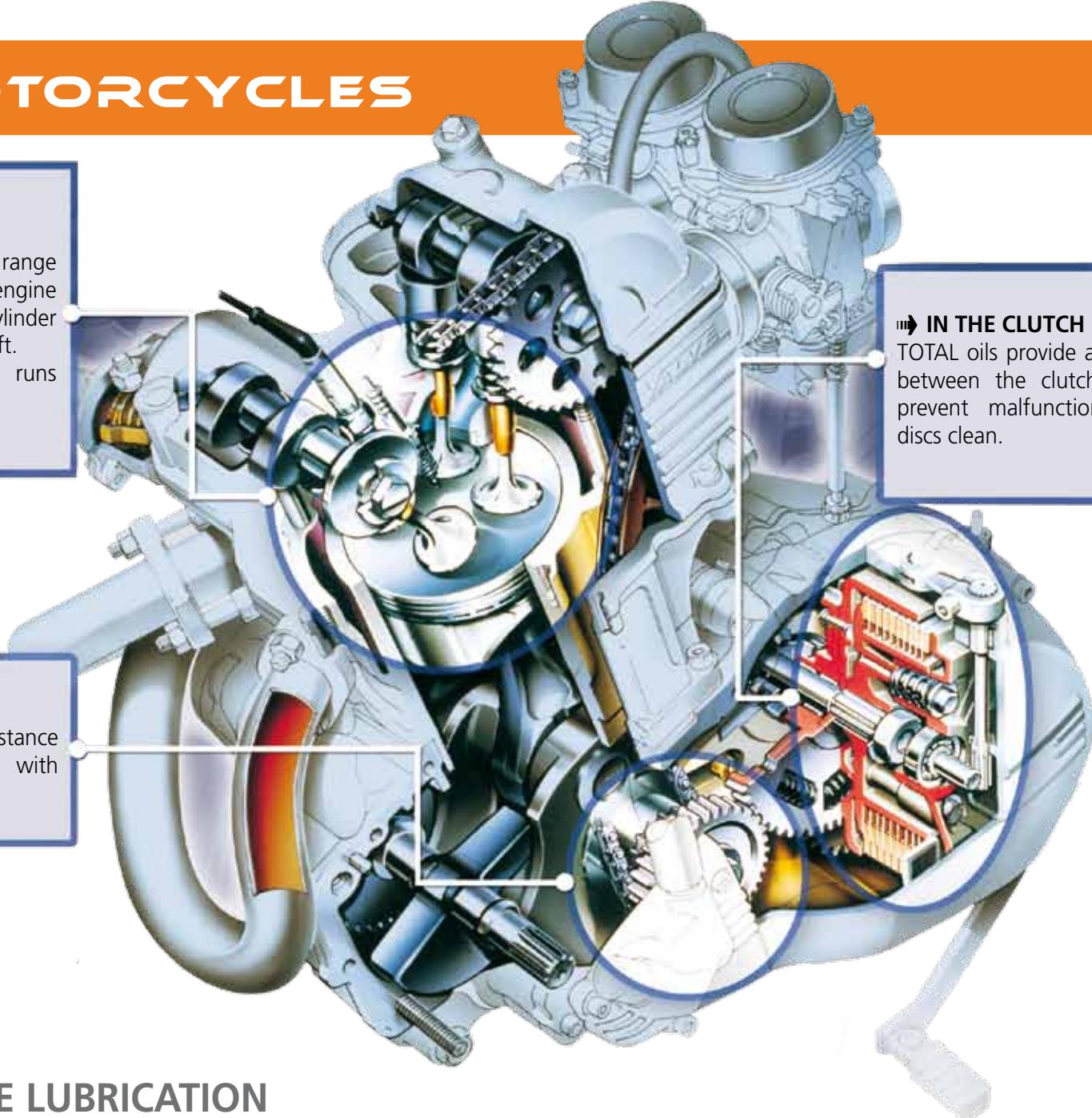
The products in the TOTAL range provide protection for all engine components: pistons, cams, cylinder sleeves, valve train and crankshaft.

The engine stays clean and runs optimally.

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► IN THE GEARBOX

TOTAL technology provides resistance to extreme pressure along with optimum gearbox protection.



4-STROKE ENGINE LUBRICATION



FOCUS: THE 2-STROKE RANGE **TOTAL SCOOTER 2T**

Synthetic-based oil

SAE 30

Gasoline engine

API TC

ISO-L-EGC/EGD

JASO FC



► **TOTAL SCOOTER 2T** is particularly recommended as a lubricant for 2-stroke scooter engines up to 125 cc³. This oil is particularly suited to the demands of urban traffic (stop & go) and journeys in rural conditions (intercity). It is compatible with leadless fuel. Oil level should comply with the vehicle manufacturer's recommendations.

► **TOTAL SCOOTER 2T** has been enhanced by adding synthetic base oils to provide high protection for the engine and associated components. Its low viscosity and the right solvents make oil and fuel mixing easier.

The reduction in exhaust system fouling goes further than required by ISO-L-EGC/EGD specifications.

The reduction in exhaust emissions (smokeless) and improved detergent properties have been obtained by the use of solvents and polymers. This lubricant therefore complies with the most recent JASO FC specification.

EVERYDAY EASE OF MIND!

» THE MOTORCYCLE RANGE

TOTAL RACING 2T	SAE 30	OIL QUALITY	API STANDARD	ISO LEVEL	JASO LEVEL
		100% synthetic	API TC	ISO-L-EGD	JASO FD
		Synthetic-based	API TC	ISO-L-EGD	JASO FD
TOTAL SPECIAL 2T		Mineral	API TC	ISO-L-EGB	JASO FB

» THE SCOOTER RANGE

TOTAL SCOOTER 2T	SAE 30	OIL QUALITY	API STANDARD	ISO LEVEL	JASO LEVEL
		Synthetic-based	API TC	ISO-L-EGC/EGD	JASO FC
TOTAL SCOOTER 2T			API STANDARD		JASO LEVEL

» RANGE EXTRA

TOTAL 2 TEMPS Z SYNT	TOTAL 2 TZ	OIL QUALITY	API STANDARD	ISO LEVEL	JASO LEVEL
		Synthetic-based	API TC	ISO-L-EGC/EGD	JASO FC
TOTAL 2 TEMPS Z SYNT			API STANDARD		JASO LEVEL
TOTAL 2 TZ		Mineral	API TC	ISO-L-EGB	JASO FB

FOCUS: 4-STROKE RANGE TOTAL RACING 4T

Synthetic oil
technology

10W-50

Gasoline engine

API SL*

*2011 upgrade

JASO MA2



► **TOTAL RACING 4T** is particularly recommended as a lubricant for mechanically high-performing 4-stroke motorcycle engines.

It is suitable for all uses in urban traffic, country jaunts and high-speed motorway travelling. This lubricant is compatible with catalytic converters and leadless fuels.

► **TOTAL RACING 4T** for 4-stroke engines allows the engine, clutch and gearbox to maintain both power and performance. This multigrade oil has been formulated for compliance with the new JASO MA2 specification.

AUDACITY AND TECHNOLOGY!

» THE MOTORCYCLE RANGE

	GRADE	OIL QUALITY	API STANDARD	JASO LEVEL
TOTAL RACING 4T	10W-50	Synthetic technology	API SL*	JASO MA2
TOTAL SPORT 4T	10W-40	Synthetic-based	API SJ*	JASO MA2
TOTAL SPECIAL 4T	20W-50	Mineral	API SH*	JASO MA2

*2011 upgrade

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» THE SCOOTER RANGE

	GRADE	OIL QUALITY	API STANDARD
TOTAL SCOOTER 4T	10W-40	Synthetic-based	API SJ*

*2011 upgrade



3 / LEISURE CRAFT

THE LUBRICANT RANGE DESIGNED BY TOTAL SPECIFICALLY FOR LEISURE BOATING.

- ⇒ Cutting-edge products that satisfy the technical requirements of manufacturers and the most recent international standards (ACEA, NMMA, API, etc.).
- ⇒ **FOR TOTAL, ENVIRONMENTAL PROTECTION IS CENTRAL TO ITS BUSINESS, AND IT THEREFORE OFFERS BIODEGRADABLE OILS.**
- ⇒ TOTAL NEPTUNA: for optimum performance and extended engine life.

TOTAL NEPTUNA: RANGE LEVELS

4-stroke engines		<ul style="list-style-type: none">• A lubricant suited to inboard and outboard gasoline engines.
2-stroke engines		<ul style="list-style-type: none">• A lubricant equally suited to sports and leisure engines.• A biodegradable version is available.

⇒ TOTAL **covers all the needs of leisure boating** by adding a range of greases, coolants, laying-up oils, combustion improvers and more.

We also offer a more comprehensive range of **bio-lubricants**, one weapon in combating water pollution. These degrade rapidly if they come into accidental contact with the water. You will find these additional products at the end of the catalogue.

FOCUS: 4-STROKE RANGE

TOTAL NEPTUNA SPEEDER 10W-30

Synthetic-based
lubricant

Fuel Economy

API SL
NMMA FC-W® N° : FB-20206B

- Satisfies the requirements of major manufacturers:
BOMBARDIER, EVINRUDE, HONDA, JOHNSON, MERCURY, SEA-DOO,
SUZUKI, YAMAHA, ETC.



► **TOTAL NEPTUNA SPEEDER 10W-30** is a latest-generation oil developed for new depolluted four-stroke outboard gasoline engines used at full load.

It is specially recommended for "nautical" outboard sports applications and for inboard backup gasoline engines.

Customer benefits relate to three areas:

- **Maintenance of engine performance over time:** its very high detergent power provides high cleanliness in the hot parts of the engine.
- **Assured engine longevity:** the oil film is extremely resistant in all conditions. Its anti-wear and anti-oxidant properties make for longer engine life. Its exceptional anti-rust and anti-corrosion properties protect the internal components of the engine from damage due to humidity.
- **Fuel savings:** its special formulation reduces fuel consumption and the production of pollutant gases.

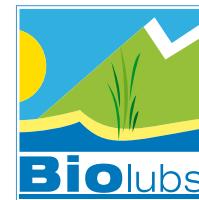
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**SET A COURSE FOR
HIGH TECHNOLOGY.**

FOCUS: THE 2-STROKE RANGE

TOTAL NEPTUNA 2T BIO-JET

100% synthetic lubricant	Biodegradable lubricant Gasoline engine	API SL NMMA TC-W3® RL-20097F	<ul style="list-style-type: none"> Satisfies the requirements of: BOMBARDIER, JOHNSON, MERCURY, SUZUKI, YAMAHA, KAWASAKI, ETC.
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► **TOTAL NEPTUNA 2T BIO-JET IS A BIODEGRADABLE, 100% SYNTHETIC LUBRICANT FOR 2-STROKE GASOLINE ENGINES.**

It combines high performance and environmental friendliness. In addition, its formula helps reduce engine smoke emissions.

Customer benefits relate to four areas:

- **Protection of the environment:** this lubricant quickly biodegrades in the natural environment. It complies with local regulations.
- **Engine cleanliness and longevity** thanks to its ash-free formulation and anti-rust and anti-corrosion properties.
- **Exceptional thermal resistance** to provide excellent engine lubrication even at extreme temperatures.
- **Easy pre-mixing:** the ease with which it mixes with gasoline provides a uniform and stable pre-mix even at low temperatures.

HIGH PERFORMANCE AND RELIABILITY.



THE TOTAL NEPTUNA 2-STROKE RANGE

		SPECIFICATIONS	MANUFACTURER APPROVALS	
		 Biodegradable		
TOTAL NEPTUNA 2T BIO-JET		100% synthetic	●	NMMA TC - W3 RL API TC
TOTAL NEPTUNA 2T RACING		Synthetic-based		<ul style="list-style-type: none">Satisfies the requirements of: Bombardier, Evinrude, Johnson, Mercury, Suzuki, Yamaha, Kawasaki, Sea-Doo, etc.
TOTAL NEPTUNA 2T SUPER SPORT		Mineral		<ul style="list-style-type: none">Satisfies the requirements of: Bombardier, Evinrude, Johnson, Mercury, Suzuki, Yamaha, Kawasaki, Sea-Doo, Mariner, Tohatsu, etc.

OIL TYPE

STANDARDS

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THE PROFESSIONAL MARKET

(lubricants for engines and transmissions)



1

ON-ROAD: Trucks, buses, waste-collection vehicles

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OFF-ROAD: Public works

TOTAL CONCEPT TP STAR
TOTAL CONCEPT TP STAR for the tropics
The transmission oil range

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OFF-ROAD: Agriculture

The TRACTAGRI range
The DYNATRANS range
Lubricants for hydraulic systems
The MULTAGRI range
The PROSYLVA range
The lubricant for milking machines
Lubricants for vacuum pumps and chainsaws

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OFF-ROAD: Coastal and inland marine navigation

Multigrade lubricants
Monograde lubricants
Special lubricants

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THE TOTAL RUBIA RANGE OF ENGINE OILS, one of the most comprehensive on the market



FOR FLEETS:

1/ For large fleets

→ **TOTAL RUBIA TIR** lubricants, all manufacturer-approved, meet the needs of fleets that often comprise vehicles of different makes. Additionally, backed by Lubconsult, our product recommendation tool, our sales force, known for its closeness to the customer and its technical competence, can provide specific recommendations for the right products (a small number of products can cover all fleet requirements).

→ **TOTAL Fuel Economy RUBIA TIR FE** engine oils help save on fuel (1 litre per 100 km, or approximately €1,000 per year per truck*) and CO₂ (almost 3 tonnes a year*), helping to optimize costs and forming part of a procurement policy focused in many cases on environmental protection.

* For vehicles with an average consumption of 33 litres per 100 km covering an average of 120,000 km a year and using Fuel Economy lubricants for both engine and transmission.

→ Lastly, our **ANAC** oil analysis service is particularly recommended for fleets with integrated workshops and bus fleets for which preventive maintenance is essential.

2/ For smaller fleets (plus "micro-fleets" with just one or two vehicles)

→ **TOTAL RUBIA FLEET** lubricants meet the needs of more modestly sized fleets of the type often seen in emerging countries, composed of vehicles for which the API standard has key importance.



FOR TRUCK DEALERSHIPS:

- ▶ **TOTAL RUBIA TIR** lubricants, all approved by the majority of truck manufacturers, are particularly suitable for all these makes of vehicle (cf. manufacturers' brochures detailing our lubricant offering as recommended for their vehicles).
- ▶ Our **ANAC** oil analysis service is particularly recommended for dealerships keen to provide high-quality after-sales service.



FOR RESELLERS AND DISTRIBUTORS (independent garages):

The **TOTAL RUBIA FLEET** product range meets their needs for products with shorter profiles (unlike the TOTAL RUBIA TIR range, these products have API approvals without additional manufacturer approvals).



✓ ON-ROAD: TRUCKS, BUSES, WASTE-COLLECTION VEHICLES

A COMPLETE RANGE: TOTAL RUBIA ENGINE LUBRICANTS

<p>TOTAL RUBIA TIR lubricants</p> <p>High-end products</p> <p>TOTAL RUBIA TIR Diesel engine oils</p> 	<p>TOTAL RUBIA TIR engine oils are approved by the majority of manufacturers: composed of high-performance base oils and additives, they offer optimum engine performance and meet the most stringent requirements, especially where latest-generation engine systems are concerned.</p> <p>► TOTAL RUBIA TIR FE (Fuel Economy) engine oils reduce friction and lower fuel consumption and CO₂.</p> <p>► TOTAL RUBIA TIR LOW SAPS engine oils protect post-treatment systems and therefore reduce pollutant emissions. These oils are odd-numbered (TOTAL RUBIA TIR 9900 FE, 8900 FE, 7900 FE, 7900).</p>
<p>TOTAL RUBIA lubricants</p> <p>For specific applications</p> <p>TOTAL RUBIA Diesel engine oils</p> 	<ul style="list-style-type: none">TOTAL RUBIA lubricants for diesel engines meet the needs of the engine systems most widely used on the market. <p>Some of these products are for specific applications, such as TOTAL RUBIA POLYTRAFFIC 10W-40 for gasoline and diesel engines (intended for use in mixed fleets combining trucks, light utility vehicles and small utility vehicles). Others meet the requirements of bus fleets, such as TOTAL RUBIA CITY & ROAD 10W-40, TOTAL RUBIA GAS 15W-40 or TOTAL RUBIA S 10W (for hydraulic applications).</p>
<p>TOTAL RUBIA FLEET lubricants</p> <p>Compliance with international standards</p> <p>TOTAL RUBIA FLEET Diesel engine oils</p> 	<ul style="list-style-type: none">TOTAL RUBIA FLEET engine oils are lubricants with shorter profiles compliant with API standards. They may be monograde or multigrade (15W-40 and 20W-50).

PRODUCTS AT THE LEADING EDGE: TRANSMISSION OILS

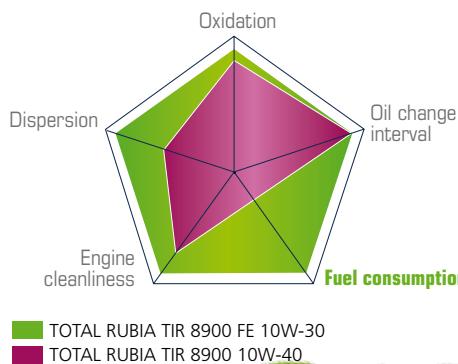
Lubricants for manual gearboxes (MTF)		<ul style="list-style-type: none">There are three distinct types of product: lubricants for manual gearboxes, those for axles and combined application products (gearbox and axle).Some products are specifically suited to the vehicles of certain manufacturers such as TRANSMISSION XI 75W-90 for Mercedes or TRANSMISSION RS 85W-140 for Scania.
Lubricants for automatic gearboxes (ATF)		<ul style="list-style-type: none">There are four distinct types of product for automatic gearboxes:<ul style="list-style-type: none">- Dexron IIIG/H level products (Fluid XLD FE and FLUIDEMATIC SYN)- Dexron IIIG level products (Fluid G3 and AT42)- Dexron IID level products (Fluid ATX and IID)- Speciality products intended particularly for certain manufacturers (such as Fluid CC for General Motors or ATF 33 for Ford)



FOCUS

TOTAL RUBIA TIR 8900 FE 10W-30

Synthetic technology	10W-30	FUEL ECONOMY Low SAPS	ACEA E6 / E7 / E4-99 issue 3 API CI-4	• MERCEDES BENZ MB-Approval 228.51 • DAF • VOLVO VDS-3 • MAN M 3477/ M 3277-CRT/3271-1 • RENAULT TRUCKS RLD-2 • SCANIA LOW ASH
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→ A product particularly well suited to the **LATEST GENERATION OF EURO 5 TRUCKS** as well as models earlier than EURO 5 with or without post-treatment systems: EGR, EGR +, DPF, SCR, SCRT, etc.

→ A lubricant that combines **TWO TECHNOLOGIES - FUEL ECONOMY* AND LOW SAPS****.

* Following a series of tests with a MAN TGX 440 truck (Euro 4), the TÜV (a certification body enjoying one of the highest international reputations) certified that the use of this lubricant alone provided an average fuel saving of 1.34%. Combined use of FE lubricants for both engine (TOTAL RUBIA TIR 8900 FE 10W-30) and transmission (TRANSMISSION XS FE 75W-80 and TRANSMISSION SYN FE 75W-90) allowed a saving as high as 6.41% to be achieved.

NB: compared with standard products: 10W-40 engine oil and 80W-90 transmission oil.

** Helps prevent clogging of the diesel particulate filter.

→ This oil allows **EXTENDED OIL CHANGE INTERVALS**.

→ In addition, its **REMARKABLE TECHNICAL PERFORMANCE** reduces wear by limiting friction. It also helps keep the engine clean.

FOR LATEST-GENERATION ENGINES.



THE TOTAL RUBIA TIR FE RANGE



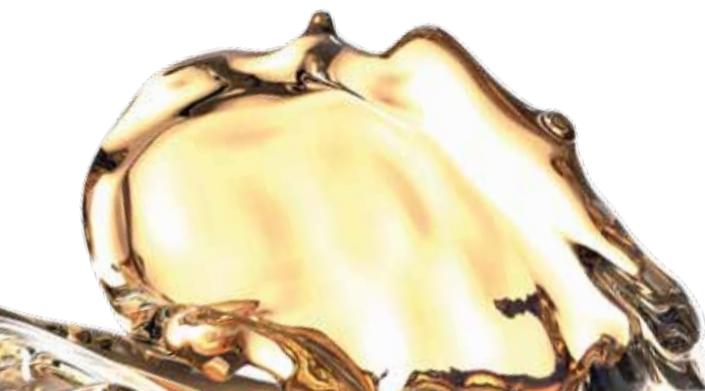
OIL TYPE	GRADE	SPECIFICATIONS		MANUFACTURER APPROVALS		
		Fuel ECO	Low SAPS			
TOTAL RUBIA TIR 9900 FE	100% synthetic	5W-30	●	●	ACEA E6	<ul style="list-style-type: none"> • MB-Approval 228.51 • MAN M 3477 • VDS-3 • RENAULT TRUCKS RLD-2
TOTAL RUBIA TIR 9200 FE	100% synthetic		●		ACEA E4/E5/E7 API CF	<ul style="list-style-type: none"> • MB-Approval 228.5 • MAN M 3277 • CES 20071/72/76/77 • Scania LDF • VDS-3 • Mack EOM+ • Renault Trucks RXD/RLD-2 • DAF HP-1/HP-2
TOTAL RUBIA TIR 8900 FE	Synthetic technology	10W-30	●	●	ACEA E6/E7/E4-99 issue 3, API CI-4	<ul style="list-style-type: none"> • Scania Low Ash • MB-Approval 228.51 • MAN M3477, MAN M3271-1 • VDS-3 • RLD-2
TOTAL RUBIA TIR 8600 FE	Synthetic technology		●		ACEA E4	<ul style="list-style-type: none"> • MAN M3277 • MB-Approval 228.5 • VDS-3 • Renault Trucks RLD-2
TOTAL RUBIA TIR 7900 FE	Semi-synthetic	10W-30	●	●	ACEA E9/E7 API CJ-4	<ul style="list-style-type: none"> • VDS-4 • RLD-3 • MB-Approval 228.31 • MAN M 3575 • CES 20081 • ECF-3
TOTAL RUBIA TIR 7400 FE	Mineral		●		ACEA E5/E7 API CI-4	<ul style="list-style-type: none"> • Global DHD-1 • MB-Approval 228.3 • MAN M 3275 • VDS-3 • Mack EOM+ • Renault Trucks RLD/RLD-2 • CES 20071/72/77/78 • DAF HP-1/HP-2
TOTAL RUBIA TIR 7200 FE	Mineral	15W-30	●		ACEA E5/E7 API CI-4	<ul style="list-style-type: none"> • Global DHD-1 • MB-Approval 228.3 • MAN M 3275 • VDS-3 • Mack EOM+ • Renault Trucks RLD/RD-2 • CES 20071/72/77/78
TOTAL RUBIA TIR 6400 FE	Mineral		●		ACEA E5/E3 API CG-4	<ul style="list-style-type: none"> • MB-Approval 228.3 • MAN M 3275 • Renault Trucks RD
TOTAL RUBIA FE 20W-30	Mineral	20W-30	●		API CF, CF-4	



THE TOTAL RUBIA TIR LOW SAPS RANGE



	OIL TYPE	GRADE	SPECIFICATIONS	MANUFACTURER APPROVALS	
				LOW SAPS	STANDARDS
TOTAL RUBIA TIR 8900	Synthetic technology	10W-40	●	ACEA E6/E7/E4-99 issue 3 API CI-4	<ul style="list-style-type: none"> • MB-Approval 228.51 • MAN M 3477-CRT • VDS-3 • RLD-2
TOTAL RUBIA TIR 7900	Semi-synthetic	15W-40	●	API CJ-4/SM API CI-4 PLUS	<ul style="list-style-type: none"> • MB-Approval 228.31 • MAN M 3575 • VDS-4 • Mack EO-O Premium Plus 07 • CES 20081 • CAT ECF-3 • Detroit Diesel Power Guard 93K218





THE TOTAL RUBIA TIR STANDARD RANGE



OIL TYPE	GRADE	MANUFACTURER APPROVALS	
		STANDARDS	APPROVALS
TOTAL RUBIA TIR 8600	Synthetic technology	10W-40	ACEA E4/E5/E7 API CF
TOTAL RUBIA TIR 7800	Mineral		API CI-4 Plus/SL
TOTAL RUBIA TIR 7400	Mineral	15W-40	ACEA E5/E7 API CI-4/SL
TOTAL RUBIA TIR 7400 SC	Mineral		ACEA E5 / E7 API CI-4
TOTAL RUBIA TIR 6400	Mineral		ACEA E5/E3 API CH-4/SJ

FOCUS

TOTAL RUBIA S 30

Monograde oil

SAE 30

API CF
ACEA E2

- MB-Approval 228.0 • MAN 270
- MTU Oil Type 1 • MIL-L 2104 E



► **TOTAL RUBIA S 30** is a monograde oil. It is well suited to all heavy diesel vehicles (trucks and buses).

GOOD ENGINE PROTECTION.

THE TOTAL RUBIA RANGE FOR SPECIAL APPLICATIONS



APPLICATION TYPE	GRADE	STANDARDS		MANUFACTURER APPROVALS
		ACEA	API	
TOTAL RUBIA POLYTRAFFIC	For gasoline and diesel engines	10W-40	ACEA A3/B3/B4/E5/E7 API CI-4/CH-4/SL	• MB- Approval 228.3, MB- Approval 229.1 • MAN M 3275 • VDS-3 • RLD2/RD-2
TOTAL RUBIA 4400	For diesel engines requiring level CG-4 and manufacturer approvals	15W-40	ACEA E2 API CG-4/SJ	• MB- Approval 228.1 • MAN 271 • VDS • Mack EOL • ZF TE-ML 04C • MIL-L 2104 E
TOTAL RUBIA CITY & ROAD	For gas bus engines	10W-40	ACEA E6/E4-08	• MB-Approval 228.51 • MAN M 3477, MAN M 3271-1 • Scania Low Ash • VOLVO CNG
TOTAL RUBIA GAS	For gas bus engines	15W-40		• VOLVO CNG • Renault Trucks RGD • MB-Approval 226.9 • MAN M 3271-1
TOTAL RUBIA GAS 5M	For gas bus engines	15W-40	ACEA A3/B3/B4/E5/E7 API CI-4/CH-4/SL	• CES 20074
TOTAL RUBIA S	For diesel engines requiring level CF and manufacturer approvals	10W	ACEA E2 API CF/SF	• MB-Approval 228.0 • MAN 270 • MIL-L 2104 E
		20W-20		• MB-Approval 228.0 • MAN 270 • MIL-L 2104 E
		SAE 30		• MB-Approval 228.0 • MAN 270 • MTU Oil Type 1 • MIL-L 2104 E
		SAE 40		• MB-Approval 228.0 • MAN 270 • MTU Oil Type 1 • MIL-L 2104 E
		SAE 50		• MB-Approval 228.0 • MAN 270 • MIL-L 2104 E

FOCUS

TOTAL RUBIA FLEET CI-4

TOTAL RUBIA FLEET CI-4

15W-40

API CI-4



► **TOTAL RUBIA FLEET CI-4** is an API CI-4 level high-quality lubricant **recommended for latest-generation vehicles**. It provides effective engine protection against wear (especially the valve train) and corrosion.

A HIGH-QUALITY LUBRICANT.



THE TOTAL RUBIA FLEET RANGE



API SPECIFICATIONS	
TOTAL RUBIA FLEET CI-4 15W-40	CI-4
TOTAL RUBIA FLEET CH-4 15W-40	CH-4
TOTAL RUBIA FLEET CH-4 20W-50	CH-4
TOTAL RUBIA FLEET CF-4 15W-40	CF-4
TOTAL RUBIA FLEET CF-4 20W-50	CF-4
TOTAL RUBIA FLEET CF 15W-40	CF
TOTAL RUBIA FLEET CF 20W-50	CF
TOTAL RUBIA FLEET CF SAE 10W	CF
TOTAL RUBIA FLEET CF SAE 30	CF
TOTAL RUBIA FLEET CF SAE 40	CF
TOTAL RUBIA FLEET CF SAE 50	CF

FOCUS

TRANSMISSION XS FE 75W-80

Manual gearboxes

75W-80

FUEL ECONOMY

API GL-4 • ZF TE-ML 01E/ 02 E/16P
MAN 341 type Z-5

• VOLVO 97307



A very high performance oil of the latest generation specifically developed to meet the most demanding requirements for ZF, MAN and Volvo manual gearboxes on heavy trucks.

■■■ **A PRODUCT THAT SAVES FUEL.**

■■■ **EXTENDED OIL CHANGE INTERVALS** thanks to its exceptional thermal stability, up to 540,000 km or 3 years).

■■■ **EXCEPTIONAL COMPONENT PROTECTION** **PROPERTIES** (gearing, bearings and synchronizers) as demonstrated in bench testing and vehicle fleet trials covering over six million kilometres (and with more than 150 oil analyses) on all types of ZF gearbox and in extremely severe conditions.

EXTENDED OIL CHANGE INTERVALS.



MANUAL TRANSMISSION OILS (MTF) FOR GEARBOXES

TRANSMISSION	GRADE	SPECIFICATIONS		RECOMMENDATIONS
		LUBRICANT	Fuel ECO	
TRANSMISSION SYN	SAE 50	●	<ul style="list-style-type: none"> API MT-1 • Eaton Approved PS 164 REV 7 International TMS-6816 Mack TO-A PLUS Meritor Automotive/Rockwell International 0-81 • Navistar TMS 6816 	
TRANSMISSION XS FE	75W-80	●	<ul style="list-style-type: none"> API GL-4 ZF TE-ML 01E/ 02E/ 16P • MAN 341 Type Z-5 	• Volvo 97307
TRANSMISSION XSV FE	75W-80	●	<ul style="list-style-type: none"> API GL-4 • MAN 341 Type V-R & Type E-4 Eaton • Voith retarder Type C • Volvo 97307 	
TRANSMISSION XI	75W-90		<ul style="list-style-type: none"> API GL-4 • MB Approval 235.11 	
TRANSMISSION TI	75W-80	●	<ul style="list-style-type: none"> API GL-4 • MAN 341 Type Z-3 & Type E-4 ZF TE-ML 02D (applicable to retarder) Eaton 	
EP	80W-85		<ul style="list-style-type: none"> API GL-4 • MAN 341 Type Z-1 MB Approval 235.1 • ZF TE-ML 02A, 17A 	
EP	85W-90		<ul style="list-style-type: none"> API GL-4 • MB Approval 235.1 (Pending) 	
EP	80W-90		<ul style="list-style-type: none"> API GL-4 • MAN 341 Type Z-1 ZF TE-ML 02A, 16A, 17A, 19A 	
TRANSTEC	80W-90 - SAE 90/SAE140		<ul style="list-style-type: none"> API GL-4 	



SPECIFICATIONS



Fuel ECO

RECOMMENDATIONS





MANUAL TRANSMISSION OILS (MTF) FOR GEARBOXES AND AXLES

		SPECIFICATIONS	GRADE	MANUFACTURER APPROVALS	MANUFACTURER RECOMMENDATIONS
TRANSMISSION SYN FE	75W-90	●		<ul style="list-style-type: none"> • API GL-4/ GL-5 /MT-1 • MB Approval 235.8 • Mack GO-J • MAN 3343 Type S • SCANIA STO 1:0 • ZF TE-ML 02B, 05B, 07A, 12B, 16F, 17B, 19C 	<ul style="list-style-type: none"> • DAF Axles • MIL-PRF-2105E / SAE J2360
TRANSMISSION RS FE	80W-90	●		<ul style="list-style-type: none"> • MAN 3343 Type M • ZF TE-ML 02B, 05A, 07A, 12E, 16B, 17B, 19B • API GL-4/ GL-5 /MT-1 	<ul style="list-style-type: none"> • MIL-PRF-2105E / SAE J2360
TRANSMISSION TX	75W-90			<ul style="list-style-type: none"> • API GL-5 	
TRANSMISSION MDL	80W-90			<ul style="list-style-type: none"> • API GL-4/ GL-5 /MT-1 • MAN 3343 Type M • ZF TE-ML 02B, 05A, 07A, 12E, 16B, 17B, 19B 	



MANUAL TRANSMISSION OILS (MTF) FOR AXLES

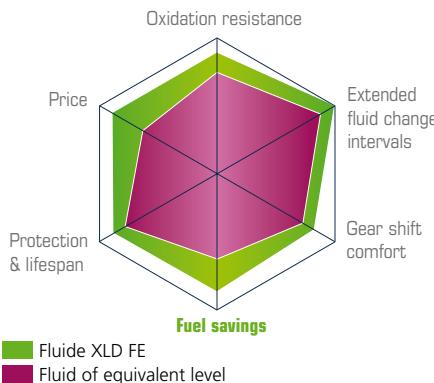


TRANSMISSION	GRADE	SPECIFICATIONS	MANUFACTURER APPROVALS
TRANSMISSION SYN FE	75W-140	●	<ul style="list-style-type: none">• API GL-5• SCANIA STO 1:0
TRANSMISSION BM	75W-90	●	<ul style="list-style-type: none">• API GL-5 / API MT-1• MB Approval 235.8 • MAN 342 Type S-1• Volvo 97312 • ZF TE-ML 07A, 12B, 16F, 17B
TRANSMISSION XPM	80W-90		<ul style="list-style-type: none">• API GL-5 / API MT-1• MB Approval 235.20 • MAN 342 Type M-2• SCANIA STO 1:0
TRANSMISSION RS FE	80W-140	●	<ul style="list-style-type: none">• API GL-5 / API MT-1• SCANIA STO 1:0• ZF TE-ML 05A, 07A, 12E, 16D, 17B, 19B
TRANSMISSION RS	85W-140		<ul style="list-style-type: none">• API GL-5• SCANIA STO 1:0 <p>Meets the requirements of MIL-PRF-2105E</p>
EP B	85W-90		<ul style="list-style-type: none">• API GL-5• MAN 342 Type M-1 • MB Approval 235.0• ZF TE-ML 05A, 07A, 16C, 17B, 19B
EP B	80W-90		<ul style="list-style-type: none">• API GL-5• MAN 342 Type M-1• ZF TE-ML 05A, 07A, 16B, 17B, 19B
TRANSMISSION TM	80W-90 - 85W-140		<ul style="list-style-type: none">• API GL-5



FOCUS: ATF TRANSMISSION OIL FLUIDE XLD FE

Automatic gearboxes	Synthetic oil	FUEL ECONOMY	Approvals: • Voith H55.6336 • MB - Approval 236.6 • MAN 339 Type V2 & Z2 • Allison C4 • ZF TE- ML 04D - 14B - 16L - 17C • Volvo 97341	Meets the requirements of the following specifications: • Allison TES 295 • Mercon/ Mercon V • Dexron III H • MB-Approval 236.91 • ZF TE-ML 14C, 02F, 11B • MAN 339 Z-3
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Derived from high performance technology, this product meets the most stringent requirements for Allison, ZF and Voith automatic gearboxes on trucks and buses.

► **A PRODUCT THAT SAVES FUEL**

Derived from high performance technology, Fluid XLD FE helps reduce fuel consumption.

► **A FLUID WITH NUMEROUS APPLICATIONS:**

- Mainly for buses and coaches (all makes) fitted with Allison, ZF or Voith automatic gearboxes, and additionally for trucks.
- For off-road vehicles such as articulated dumpers, domestic waste collection vehicles, oil drillers, etc.

► **EXTENDED OIL CHANGE INTERVALS**

Tests conducted with a fleet of Man and Volvo buses fitted with Allison, ZF and Voith automatic gearboxes have highlighted the fact that use of Fluid XLD FE allows intervals between oil changes to be increased up to 160,000 km in normal operating conditions or 80,000 km in severe conditions.

FOR STRINGENT REQUIREMENTS.



TRANSMISSION OIL FOR AUTOMATIC GEARBOXES (ATF)



PRODUCT TYPE		STANDARDS (APPROVAL/LEVEL)
Dexron® IIIG/H products	FLUIDE XLD FE	<ul style="list-style-type: none">• Voith H55.6336 • MB - Approval 236.6 • MAN 339 Type V2 & Z2• Allison C4 • ZF TE- ML 04D - 14B - 16L - 17C • Volvo 97341 <p>Meets the requirements of the following specifications:</p> <ul style="list-style-type: none">• Allison TES 295 • MERCON® / MERCON® V• DEXRON® III H • MB-Approval 236.91• ZF TE-ML 14C, 02F, 11B • MAN 339 Z-3
	FLUIDEMATIC SYN	<ul style="list-style-type: none">• DEXRON III G • ZF 04D, 14B, 16L• VOITH H55.6335 • MAN 339 type V1 & Z1• MB-Approval 236.5 • ALLISON C4
Dexron® IIIG products	FLUIDE AT 42	<ul style="list-style-type: none">• DEXRON® III G • ZF 02F, 03D, 04D, 09, 14A, 17C• VOITH H55.6335 • MAN 339 V1 & Z1• MB-Approval 236.1 • PSA (BV ZF 4HP14/18 ou DAH)• VOLVO 97341
	FLUIDE G3	<ul style="list-style-type: none">• DEXRON® III G • ZF 03D, 04D, 09, 14A, 17C• VOITH H55.6335 • MAN 339 V1 & Z1• MB-Approval 236.9 • ALLISON C4• Renault Trucks DAH • VOLVO 97341
Dexron® IID products	FLUIDE ATX	<ul style="list-style-type: none">• DEXRON® II D • ZF 03D, 04D, 09, 11A, 14A, 17C• VOITH H55.6335 • MAN 339 Type V1 & Z1• MB-Approval 236.6 • PSA S712102 (DAH)
	FLUIDE IID	<ul style="list-style-type: none">• DEXRON® II D • ZF 04D, 09, 11A, 17C• VOITH H55.6335 • CAT TO-2
Speciality products	FLUIDE CC	<ul style="list-style-type: none">• MB-Approval 236.2 • MAN 339 Type A
	ATF 33	<ul style="list-style-type: none">• Ford M2C-33 F / G

2/ OFF-ROAD: PUBLIC WORKS

► TOTAL DEVELOPS LUBRICANTS SUITED TO CONSTRUCTION, MINE AND QUARRY MACHINERY.

A complete range of special products to satisfy all international standards and approvals required in this segment.

TOTAL CONCEPT TP STAR has been developed for customers wishing to simplify lubrication for their equipment fleet.



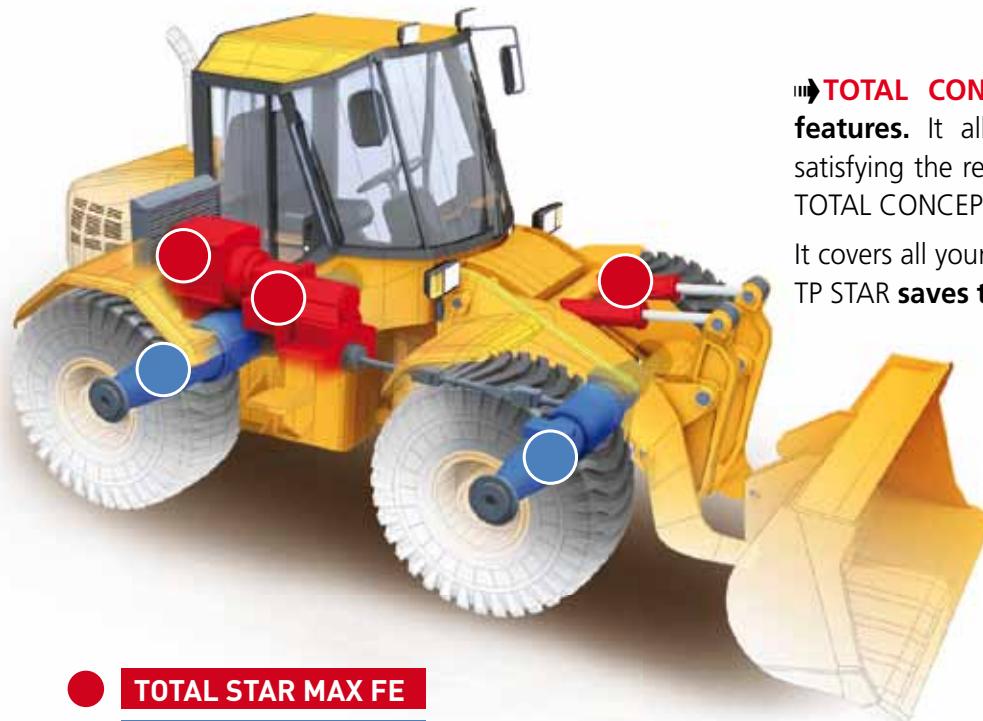
RANGE PRESENTATION

TOTAL CONCEPT TP STAR		<ul style="list-style-type: none">• TOTAL CONCEPT TP STAR allows you to combine high technical performance with ease of use.• Two versions are available, one for temperate countries and the other for the tropics.
Special products		<ul style="list-style-type: none">• The TOTAL range of special public works products covers a large number of applications.• TOTAL supplies lubricants for engines, transmissions, hydraulic systems, gearboxes, final axle reduction drives and greases suited to the specific needs of public works machinery.



FOCUS

TOTAL CONCEPT TP STAR



- TOTAL STAR MAX FE
- TOTAL STAR TRANS

► A PATENT HAS BEEN FILED FOR TOTAL STAR MAX (FE AND HT) OILS BASED ON THEIR AUTO-ADAPTIVE CAPACITY.

This unique property means that these lubricants are able to adapt very quickly to the requirements of engines, mechanical gearboxes and powershifts, as well as hydraulic circuits. In addition, **TOTAL STAR MAX FE** engine lubricant for use in temperate countries provides:

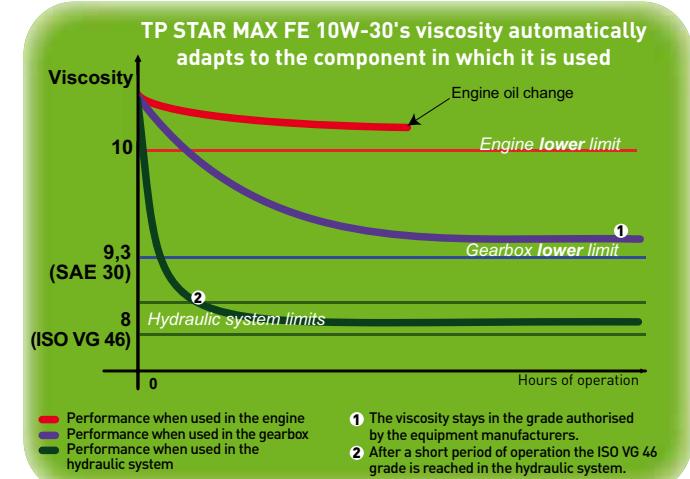
- Lower fuel consumption due to its Fuel Economy formula,
- Extended life for the particulate filter due to its Low SAPS formulation.

SUSTAINABLE INNOVATION.

► **TOTAL CONCEPT TP STAR** offers you a complete set of **exceptional performance features**. It allows all the components of worksite machinery to be lubricated while still satisfying the requirements of the leading equipment manufacturers and international standards. **TOTAL CONCEPT TP STAR** means **just two lubricants for your entire fleet of machinery**.

It covers all your needs as well as guaranteeing optimum technical performance. **TOTAL CONCEPT TP STAR** **saves time and reduces costs**. The advantages are numerous:

- Less risk of stock outages
- Simpler ordering, procurement and storage of lubricants
- Less risk of product mix-ups when servicing equipment
- Lower transport costs
- Savings on servicing and the management of used oil and packaging





TOTAL CONCEPT TP STAR FOR TEMPERATE COUNTRIES

	GRADE	APPLICATIONS		STANDARDS	MANUFACTURER APPROVALS
		ADVANTAGES			
TOTAL STAR MAX FE	Engines 10W-30 Gearboxes SAE 30 Hydraulic fluids ISO VG 46	<ul style="list-style-type: none"> - Engines - Hydraulic circuits (work or travel) - Gearboxes (mechanical or powershift) 	  <ul style="list-style-type: none"> - FE Formula - Compatible with Diesel Particulate Filters (DPF) - Rapid machinery start-up (most importantly in winter) - Optimized oil change intervals - Auto-adaptive formulation 	Engines <ul style="list-style-type: none"> • API CJ-4 / CI-4 plus/ CI-4 • ACEA E9/E7/E5 • JASO DH-2 Gearboxes <ul style="list-style-type: none"> • API GL-4 	Engines Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR • CUMMINS • KOMATSU • DAIMLER-MB • MAN • MTU • VOLVO Gearboxes Meets the requirements of: <ul style="list-style-type: none"> • ALLISON C4 • CATERPILLAR TO-4 • KOMATSU Clutch Hydraulic systems <ul style="list-style-type: none"> • JCMA • CASE • KOMATSU
TOTAL STAR TRANS	80W-110	<ul style="list-style-type: none"> - Hypoid and reduction axles - Autoblocking differentials with limited slip discs - Oil-immersed brake systems 	<ul style="list-style-type: none"> - High-technology chemistry - Resistance to pressure and shock - High friction performance - Special "Limited Slip" additivation 	Meets the following requirements: Axles and final reduction drives <ul style="list-style-type: none"> • API GL-5 LS Gearboxes and immersed brakes <ul style="list-style-type: none"> • API GL-4 • API MT-1 	Axles and final reduction drives Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR FD-1 (SAE 50) Gearboxes and immersed brakes Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR TO-4 • KOMATSU Clutch Limited slip differentials <ul style="list-style-type: none"> • CASE • VOLVO • LIEBHERR



TOTAL CONCEPT TP STAR FOR THE TROPICS

	GRADE	APPLICATIONS		ADVANTAGES	STANDARDS	MANUFACTURER APPROVALS
		Engines	Gearboxes			
TOTAL TP STAR MAX HT	15W-40 SAE 40 ISO VG 68	Engines 15W-40 Gearboxes SAE 40 Hydraulic fluids ISO VG 68	<ul style="list-style-type: none"> - Engines - Hydraulic circuits (work or travel) - Gearboxes (mechanical or powershift) 	<ul style="list-style-type: none"> - Enhanced viscosity - Usage up to +50°C - Enhanced chemical formula for greater resistance to all diesel qualities - Optimized oil change intervals - Auto-adaptive formulation 	Engines <ul style="list-style-type: none"> • API CI-4 / CH-4 • ACEA E7/E5 • GLOBAL DHD-1 • JASO DH-1 Gearboxes <ul style="list-style-type: none"> • API GL-4 	Engines Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR • CUMMINS • KOMATSU • DAIMLER-MB • MAN • MTU • VOLVO Gearboxes Meets the requirements of:: <ul style="list-style-type: none"> • ALLISON • CATERPILLAR TO-4 • KOMATSU Clutch Hydraulic systems <ul style="list-style-type: none"> • JCMA • CASE • KOMATSU
TOTAL TP STAR TRANS	85W-110		<ul style="list-style-type: none"> - Hypoid (and final reduction) axles - Autoblocking differentials with limited slip discs - Oil-immersed braking systems 	<ul style="list-style-type: none"> - Usage up to +50°C - High-technology chemistry - Resistance to pressure and shock - Friction performance 	Meeting the following requirements: Axles and final reduction drives <ul style="list-style-type: none"> • API GL-5 LS Gearboxes and immersed brakes <ul style="list-style-type: none"> • API GL-4 • API MT-1 	Axles and final reduction drives Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR FD-1 (SAE 50/60) Gearboxes and immersed brakes Meets the requirements of: <ul style="list-style-type: none"> • CATERPILLAR TO-4 • KOMATSU Clutch Limited slip differentials <ul style="list-style-type: none"> • CASE • VOLVO • LIEBHERR



THE ENGINE OIL RANGE

		SPECIFICATIONS		MANUFACTURER APPROVALS	
		Fuel ECO	Low SAPS		
TOTAL RUBIA WORKS 2000 FE	10W-30	●	●	<ul style="list-style-type: none">JASO DH-2ACEA E9 / E7 (E5)API CJ-4 / CI-4 plus / CI-4 / SM <p>Meeting the requirements of:</p> <ul style="list-style-type: none">CATERPILLAR ECF-3 / ECF-2 / ECF-1aKOMATSU EO-DH <p>• Suitable for the engines of: HITACHI, ISUZU, MITSUBISHI, DEERE, PERKINS, CASE NEW-HOLLAND, LIEBHERR, JCB, etc.</p>	
TOTAL RUBIA WORKS 1000	15W-40			<ul style="list-style-type: none">JASO DH-1ACEA E7 / E5API CI-4/SL <p>Meeting the requirements of:</p> <ul style="list-style-type: none">CATERPILLAR ECF-1a, ECF-2KOMATSU EO-DH	

GRADE

STANDARDS

A bio version is available.
You can find all the details in
the "Biolubricants" category
of the catalogue.



THE TRANSMISSION OIL RANGE: POWERSHIFT GEARBOXES

		SPECIFICATIONS	GRADE	STANDARDS	MANUFACTURER APPROVALS
DYNATRANS VX FE		 Fuel ECO	●	API GL-4	Meeting the requirements of: • VOLVO • JOHN DEERE • KUBOTA • MASSEY FERGUSON • AGCO/Allis • CNH • CASE • NEW HOLLAND • FORD • VALTRA • MC CORMICK • KOMATSU
DYNATRANS MPV				API GL-4	• MASSEY FERGUSON : CMS M 1145 / 1143 • VOLVO CE : WB 101 • ZF: TE-ML 03E / 05F / 06K / 17E Meeting the requirements of: • JOHN DEERE • CNH • CASE • NEW HOLLAND • FORD • MC CORMICK, etc.
DYNATRANS AC	SAE 30				• ZF: TE-ML 03C • ALLISON: C4 - N° 33122010 Meeting the requirements of: • CATERPILLAR TO-4 • KOMATSU
DYNATRANS FR				API GL-4	Meeting the requirements of: • RENAULT AGRICULTURE • MASSEY FERGUSON • NEW HOLLAND • FORD



A bio version is available.
 You can find all the details in
 the "Biolubricants" category
 of the catalogue.



THE TRANSMISSION OIL RANGE: AXLES AND REDUCTION DRIVES

	GRADE		MANUFACTURER APPROVALS
DYNATRANS LS	20W-40	API GL-4	<ul style="list-style-type: none">• ZF TE-ML 05F / 06K / 17E <p>Meeting the requirements of:</p> <ul style="list-style-type: none">• CASE • HANOMAG • HITACHI • KOMATSU
DYNATRANS DA	80W-90 85W-140	API GL-5-LS MIL.L. 2105D	<ul style="list-style-type: none">• ZF TE-ML 05C / 12C / 16E / 21C <p>Meeting the requirements of:</p> <ul style="list-style-type: none">• LIEBHERR • TEREX • VOLVO • CASE • JCB, etc.
TRANSMISSION TM	80W-90 / 85W-140	API GL-5	

STANDARDS



THE TRANSMISSION OIL RANGE: AUTOMATIC TRANSMISSIONS

	GRADE		MANUFACTURER APPROVALS
TOTAL RUBIA C4	15W-40	ACEA E2 API CH-4	<ul style="list-style-type: none">• ALLISON C4 - n°31932006
FLUIDE XLD FE			<ul style="list-style-type: none">• Voith H55.6336 • DAIMLER MB-Approval 236.6• MAN 339 Type V2 & Z2 • Allison C4• ZF TE- ML 04D, 14B, 16L, 17C • VOLVO 97341
FLUIDE G3			<ul style="list-style-type: none">• ALLISON C4 - n°30582005• DEXRON® III G level and Ford MERCON®• ZF TE-ML 03D, 04D, 09, 14A, 17C• VOITH H 55.633535• MAN 339 type V-1 [ex MAN 339 Type F]• MAN 339 type Z-1 [ex MAN 339 Type F]• MB-Approval 236.5 and 236.9

STANDARDS

A bio version is available.
You can find all the details in
the "Biolubricants" category
of the catalogue.

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3/ OFF-ROAD: AGRICULTURE



A RANGE OF HIGH-TECHNOLOGY LUBRICANTS DEDICATED TO THE WORLD OF AGRICULTURE



TOTAL has strengthened its service offering for professionals in the agricultural industry, adding a complete range of products entirely dedicated to agricultural machinery.

In order to provide a practical, economic solution for the demands of an activity requiring sophisticated equipment, TOTAL has designed innovative products suited to the most recent technological developments.

► THE TOTAL RANGE IS COMPREHENSIVE, COMPRISING:

- Lubricants for engines
- Lubricants for transmissions
- Lubricants for hydraulic systems
- Multifunctional lubricants
- Lubricants for special applications

TOTAL also supplies greases and coolants - details on these can be found at the end of the catalogue.



LUBRICANTS FOR ENGINES

The TRACTAGRI range		<ul style="list-style-type: none">• A range of lubricants that combines high performance with economy.
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LUBRICANTS FOR TRANSMISSIONS

The DYNATRANS range		<ul style="list-style-type: none">• A range of lubricants specifically suited to gearboxes, axles with immersed brake systems and hydraulic circuits.
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LUBRICANTS FOR HYDRAULIC SYSTEMS

The HYDRAULIC range		<ul style="list-style-type: none">• A range of lubricants specifically designed for modern hydraulic systems.
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3/ OFF-ROAD: AGRICULTURE

MULTIFUNCTIONAL LUBRICANTS

The MULTAGRI range	Super Tractor Oil Universal	<ul style="list-style-type: none">• A lubricant that helps streamline the servicing requirements of all types of agricultural machinery.
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LUBRICANTS FOR SPECIAL APPLICATIONS

Mechanized farming equipment	<ul style="list-style-type: none">• A range of products specifically suited to 2-stroke and 4-stroke engines and farm machinery.
Milking machines	<ul style="list-style-type: none">• The AGRITRAITE lubricant is suitable for all types of milking machine.
Vacuum pumps	<ul style="list-style-type: none">• The VACUUMPUMP OIL lubricant is suitable for all types of vacuum pump.
Chainsaw chains	<ul style="list-style-type: none">• MTC lubricants are suitable for conveyor and chainsaw chains.

FOCUS

TRACTAGRI HDX SYN FE

10W-30

FUEL ECONOMY

ACEA E4/E5/E7

- DAIMLER MB-Approval 228.5
- DEUTZ: DQC III-05



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The **TRACTAGRI HDX SYN FE 10W-30** lubricant enables fuel to be saved and enhances machinery power.

It has numerous advantages:

- Exceptional anti-wear and anti-corrosion properties
- Properties that promote equipment durability where it is operated in conditions of high temperature under heavy loads
- Excellent resistance to shear forces in order to maintain optimum viscosity for lubrication of the engine

“ Testimonial:

In one year, I was able to save 600 litres* of fuel thanks to the Fuel Economy innovation. ”

*Recorded reduction of fuel consumption of 2.8% in road testing and 5.5% on test bed. Or a saving of 600 litres for a 155HP tractor consuming 18 litres per hour on road and 35 litres per hour at full load operating 250 hours per year on road fully loaded. This result was achieved using the TRACTAGRI Fuel Economy lubricant in the engine, in combination with DYNATRANS MPV in the transmission, in comparison with a standard 15W-40 lubricant (in both engine and transmission).

PROVEN SAVINGS.



THE TRACTAGRI RANGE

		SPECIFICATIONS		MANUFACTURER APPROVALS	
					
TRACTAGRI HDX SYN FE	10W-30	●		ACEA E4/E5/E7	<ul style="list-style-type: none"> DAIMLER MB-Approval 228.5 DEUTZ: DQC III-05
TRACTAGRI HDZ FE	10W-30	●	●	ACEA E9 / E7 (E5) API CJ-4 / CI-4 plus / CI-4 / SM	<ul style="list-style-type: none"> DAIMLER MB-Approval 228.31 CUMMINS: CES 20081 DEUTZ: DQC III-LA-10 <p>Compliant with:</p> <ul style="list-style-type: none"> CATERPILLAR: ECF-3 / ECF-2 / ECF-1a KOMATSU: EO-DH
TRACTAGRI HDX FE	15W-30	●		ACEA E7/E5 API CI-4/SL	<ul style="list-style-type: none"> DAIMLER MB-Approval 228.3 CUMMINS: CES 20078 (20077) DEUTZ: DQC II-05 <p>Compliant with:</p> <ul style="list-style-type: none"> CATERPILLAR: ECF-2
TRACTAGRI HDX SYN	10W-40			ACEA E7/E5, A3/B4/B3 API CI-4/ CH-4 / SL	<ul style="list-style-type: none"> DAIMLER MB-Approval 228.3 CUMMINS: CES 20078 (20077/20076) DEUTZ: DQC III-05
TRACTAGRI HDX	15W-40	Suitable for a very wide variety of engines		ACEA E7/E5 API CI-4 / CH-4 / SJ	<ul style="list-style-type: none"> DAIMLER MB-Approval 228.3 CUMMINS: CES 20078 (2007/20076)
GRADE		STANDARDS			

FOCUS

DYNATRANS VX FE

FUEL ECONOMY

API GL-4

Compliant with the following specifications:

- VOLVO CE WB 102 • JOHN DEERE JDM J 20D • KUBOTA S UDT



→ The transmission **DYNATRANS VX FE** lubricant is suitable for a wide variety of agricultural machinery, which means that lubricant stocks can be reduced.

→ **IT HELPS REDUCE ENERGY LOSS THROUGH FRICTION AND SPLASHING**, thus saving on fuel consumption.

→ Its properties ensure excellent behaviour at both low and high temperatures. In addition, the **DYNATRANS VX FE** lubricant provides enhanced protection since it possesses good loading capacity, thus ensuring increased durability for gearing and hydraulic components.

FOR REDUCED STOCKS.



THE DYNATRANS RANGE

		SPECIFICATIONS	MANUFACTURER APPROVALS	
DYNATRANS VX FE		Fuel ECO 	API GL-4	Compliant with the following specifications: • VOLVO CE WB 102 • KUBOTA S UDT • JOHN DEERE JDM J 20D
DYNATRANS MPV		For transmissions fitted with immersed disc brakes and hydraulic systems for agricultural tractors	API GL-4	• MASSEY FERGUSSON: CMS M 1145/1143 • VOLVO CE: WB 101 • ZF TE - ML 03E/05F/06K/17E
DYNATRANS CVT		For continuously variable transmissions (CVT) fitted to agricultural tractors	API GL-4	• ZF TE-ML 06F • MASSEY FERGUSON: CMS M 1145
DYNATRANS FR		For transmissions fitted with immersed disc brakes and hydraulic systems for agricultural tractors	API GL-4	• RENAULT CLAAS RA 180596-88/3 • FORD M2C 86 B/C
DYNATRANS HD	85W-140	For gearing subject to heavy loads	API GL-5 MIL.L.2105D	
DYNATRANS MDL	80W-90	For gearing subject to heavy loads	API GL-4 • API GL-5 MIL.L.PRF 2105E SAE J23 60	
DYNATRANS LS	80W-90	For axles fitted with an autoblocking differential system with limited slip discs	API GL-5-LS MIL.L. 2105D	• ZF TE-ML 05C/12C/16E/21C

GRADE

STANDARDS



THE EXTRA RANGE

		STANDARDS
AGRIMATIC HP	For automatic transmissions and systems requiring an ATF fluid	DEXRON III G
SPECIFICATIONS		

TOTAL can also supply biodegradable products you will find in the section devoted to "Cross-category products" in this catalogue.

FOCUS

HYDRAGRI 32-46-68

For hydrostatic and hydraulic systems exposed to wide temperature variations

Compliant with the following specifications:

- ISO VG 46 • ISO 6743/4-HV • AFNOR NF 48-603 HV • DIN 51524 P3 HVLP



- The **HYDRAGRI 32-46-68** lubricant has been specially designed for hydraulic systems operating in normal temperature and pressure conditions.
- **VERY HIGH VISCOSITY INDEX FOR VERY STEADY OPERATION** and easy starting at any temperature.
- Very low pour point for use at very low temperatures.
- **Totally neutral** for gaskets and seals.

EFFECTIVE AT ALL TEMPERATURES.



LUBRICANTS FOR HYDRAULIC SYSTEMS

SPECIFICATIONS		
HYDROFLO CT	For hydrostatic and hydraulic systems exposed to wide temperature variations	<ul style="list-style-type: none">• ISO VG 46• ISO 6743/ 4-HV• AFNOR NF 48-603 HV• DIN 51524 P3 HVLP
HYDRAGRI 32-46-68	For hydraulic systems operating in normal temperature and pressure conditions	<ul style="list-style-type: none">• ISO VG 32/46/68• AFNOR NF E 48-603 HV• DIN 51524 P3 HVLP

STANDARDS

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**TOTAL can also supply
biodegradable products you will find in
the section devoted to "Cross-category
products" in this catalogue.**

FOCUS

STOU MULTIFUNCTIONAL LUBRICANTS

STOU (Super Tractor Oil Universal)



► TOTAL develops formulas for multifunctional lubricants. The products in the MULTAGRI range allow the servicing requirements of all types of agricultural machinery to be streamlined.

► **MULTAGRI PRO-TEC 10W-40** is intended for the lubrication of all mechanical parts in tractors, agricultural and related machinery in all seasons of the year.

► **MULTAGRI MS 15W-40** is intended for the lubrication of the various moving parts of tractors and harvesters in all seasons.

STREAMLINED EQUIPMENT SERVICING.



THE MULTAGRI RANGE



	GRADE	STANDARDS	MANUFACTURER APPROVALS
	10W-40		• MASSEY FERGUSON CMS M 1145/1144 • ZF TE-ML 06B/07B
MULTAGRI PRO-TEC	15W-40	ACEA E1	• MASSEY FERGUSON CMS M 1144 • ZF TE-ML 60B/07B
MULTAGRI MS			

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THE PROSYLVA POWER AGRICULTURE RANGE

	GRADE		STANDARDS
PROSYLVA 2T SYN		For very high speed 2-stroke engines used in mechanized farm equipment	API TC JASO FD ISO L-EGD (detergency level)
PROSYLVA 2T Z		For 2-stroke engines used in mechanized farm equipment	API TC
PROSYLVA 4T SYN	10W-40	For 4-stroke gasoline engines used for demanding mechanized farming applications	API SL ACEA A3
PROSYLVA 4T	15W-40	For 4-stroke gasoline and diesel engines in professional mechanized farming equipment	API SJ/ CG4 ACEA A2/B2

SPECIFICATIONS



LUBRICANT FOR MILKING MACHINES

		STANDARDS
AGRITRAITE	For milking machine vacuum pumps (vane pumps, screw pumps, rotary piston pumps of ROOTS type)	ISO VG 68

SPECIFICATIONS



LUBRICANT FOR VACUUM PUMPS

SPECIFICATIONS		
VACUUMPUMP OIL	For vacuum pumps	ISO VG 220 ISO 6743/4 HL
STANDARDS		



LUBRICANT FOR CHAINSAWS

SPECIFICATIONS	
MTC 100 - 150 - 220	For chainsaw chains - suitable for lost oil lubrication of fast-moving chains (chainsaws, hedge cutters, conveyors, etc.)

TOTAL can also supply
biodegradable products you will find in
the section devoted to "Cross-category
products" in this catalogue.

4/ COASTAL AND INLAND MARINE NAVIGATION



TOTAL DEVELOPS HIGH-TECHNOLOGY LUBRICANTS WELL SUITED TO FISHING AND COASTAL AND INLAND MARINE NAVIGATION.





RANGE PRESENTATION

Multigrade engine lubricants	<ul style="list-style-type: none">• High-speed 4-stroke diesel engines
Monograde engine lubricants	<ul style="list-style-type: none">• 4-stroke diesel engines• 2-stroke diesel engines
Special lubricants	<ul style="list-style-type: none">• Hydraulic systems• Stern tubes• Reduction drives

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**TOTAL also supplies
biolubricants. You will find the
complete range in the section
devoted to "Cross-category
products" in this catalogue.**

FOCUS

CAPRANO TDJ FE 10W-30

10W-30

FUEL ECONOMY
Low SAPSACEA E9/E7
API CJ-4

- CUMMINS CES 20081
- BAUDOUIN SMB 5 • DEUTZ DQC III-10 LA
- Compliant with CATERPILLAR ECF-3



► The **TOTAL CAPRANO TDJ FE 10W-30** lubricant is based on Fuel Economy and Low SAPS technology. It is well suited to latest-generation **4-stroke industrial diesel engines** and particularly to diesel engines with or without particulate filters.

Its formulation will help you **save on fuel** by up to 5%* and to **reduce emissions of CO₂** by up to 75 tonnes**.

► **ADVANTAGES:**

- Helps save on fuel
- Extends particulate filter life
- Helps reduce pollutant emissions
- Compatible with the post-treatment systems installed in the most recent engines

* Result obtained in comparison with a standard SAE 40 oil for a boat consuming 80 litres per hour on average and operating 7,000 hours per year. Results vary according to engine type and conditions of use.

** Based on 5% fuel saving / 2.7 kg CO₂ per litre of fuel (EPA) / 7,000 hours' use per year / average consumption of 80 lph according to engine type and conditions of use.

THE FUEL-SAVING LUBRICANT.



MULTIGRADE LUBRICANTS

(4-stroke diesel engines)

		SPECIFICATIONS		MANUFACTURER APPROVALS	
		Fuel ECO	Low SAPS		
GRADE	STANDARDS				
TOTAL CAPRANO TDJ FE	10W-30	●	●	ACEA E9/E7 API CJ-4	<ul style="list-style-type: none"> CUMMINS CES 20081 BAUDOUIN SMB 5 DEUTZ DQC III-10 LA Compliant with CATERPILLAR ECF-3
TOTAL CAPRANO ENERGY FE	15W-30	●		ACEA E7 API CI-4	<ul style="list-style-type: none"> CUMMINS CES 20078 /20077 BAUDOUIN SMB 5 WARTSILA - POYAUD Series UD (except 33 and 45) MAN M3275 • VOLVO VDS-3 Compliant with CATERPILLAR ECF-2
TOTAL CAPRANO TDJ	15W-40		●	ACEA E9/E7 API CJ-4	<ul style="list-style-type: none"> CUMMINS : CES 20081 BAUDOUIN : SMB 5 • VOLVO : VDS-4 Meeting the requirements of CATERPILLAR ECF-3 specification
TOTAL CAPRANO TDI	15W-40			ACEA E7 / E5 API CI-4	<ul style="list-style-type: none"> BAUDOUIN SMB 5 CUMMINS CES 20078 (20077 / 20076) MAN M3275 • VOLVO VDS-3 • MTU TYPE 2 Compliant with CATERPILLAR ECF-2, MITSUBISHI semi-fast Reduction drives and reversing gear: ZF TE-ML 04C
TOTAL CAPRANO TDH	15W-40			ACEA E3 API CH-4	<ul style="list-style-type: none"> BAUDOUIN SMB 5 CUMMINS CES 20071 / 20072 MAN M3275 • MTU TYPE 2 • VOLVO VDS -2 Compliant with CATERPILLAR ECF-1-a Reduction drives and reversing gear: ZF TE-ML 04C
TOTAL CAPRANO TD	15W-40			ACEA E2 API CG-4/SH	<ul style="list-style-type: none"> BAUDOUIN SMB 4 MAN 271 • MTU TYPE 1 VOLVO VDS Reduction drives and reversing gear: ZF TE-ML 04C



MONOGRADE LUBRICANTS

(4-stroke diesel engines)

		SPECIFICATIONS	MANUFACTURER APPROVALS	
		GRADE	STANDARDS	
TOTAL CAPRANO MT	SAE 30 SAE 40	TBN 13.2 Propulsion engines High-sulphur diesel fuel	API CI-4	<ul style="list-style-type: none"> BAUDOUIN SMB3 • MTU Typ 2 Suits the following engines: CATERPILLAR • ABC • DEUTZ • MITSHUBISHI • WARTSILA POYAUD and reduction drives: ZF • BAUDOUIN • MASSON
TOTAL CAPRANO TD	SAE 30 SAE 40	TBN 10 Propulsion engines Standard diesel fuel	API CF	<ul style="list-style-type: none"> ABC • DEUTZ • BOLNES • MAK • STORK • MTU Reduction drives and reversing gear: ZF TE-ML 04A / 04B Suitable for reduction drives and reversing gear: BAUDOUIN, MASSON
TOTAL RUBIA FP	SAE 40	TBN 17 Propulsion engines	API CE	<ul style="list-style-type: none"> BAUDOUIN SMB 3 • WARTSILA POYAUD Series UD Reduction drives and reversing gear: ZF TE-ML 04A / 04B Suits the following engines: MAK, PERKINS Suitable for reduction drives and reversing gear: BAUDOUIN, MASSON

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(2-stroke diesel engines)

		SPECIFICATIONS	MANUFACTURER APPROVALS	
		GRADE	STANDARDS	
TOTAL MILKANO TC	SAE 30 SAE 40	Detroit Diesel engines	API CF-2	<ul style="list-style-type: none"> DETROIT DIESEL 53, 71, 92 and 149 Marine



SPECIAL LUBRICANTS: HYDRAULICS

	SPECIFICATIONS
HYDROFLO CT	<ul style="list-style-type: none">• ISO VG 46• ISO 6743/4-HV• DIN 51524 p.3 - HVLP• AFNOR NF 48 603 - HV



SPECIAL LUBRICANTS: FOR REDUCTION DRIVES

	SPECIFICATIONS
CARTER EP 150, 220, 320	<ul style="list-style-type: none">• DIN 51517 Part 3 → group CLP• ISO 12925-1 CKD• AGMA 9005 - D94 EP• CINCINNATI MILACRON• DAVID BROWN• AISI 224• SEB 181 226• FLENDER



SPECIAL LUBRICANTS: FOR STERN TUBES

	SPECIFICATIONS
BIOHYDRAN TMP 100	<ul style="list-style-type: none">• VDMA 24568: HEES• ISO 15380: HEES

CROSS-CATEGORY PRODUCTS

(all segments)



1

Biolubricants
Water - public works
Mountain - forests and agriculture
The Biolubricant range

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2

Greases

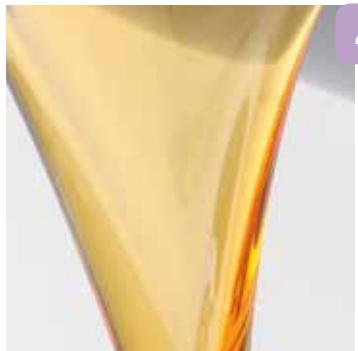
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3

Coolants

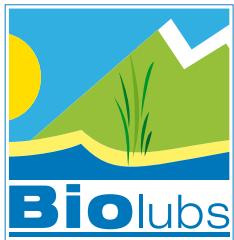
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4

Hydraulic and brake fluids

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TOTAL is acutely aware of the need for environmental protection and sustainable development and has developed a complete range of lubricants primarily intended for activities that can present direct risks for the environment if the product leaks or is accidentally spilled.



► WHAT IS A BIOLUBRICANT?

The term "biolubricant" applies to all lubricants that **biodegrade rapidly** and **which are non-toxic** for human beings and aquatic habitats.

They may be based on:

- Plant oils (such as rapeseed oil)
- Synthetic esters manufactured from modified renewal oils

The key advantages of biolubricants

- Rapid biodegradability
- Low toxicity
- Environmental friendliness
- Good lubricating properties
- High viscosity index
- Longer equipment life

► SECTORS OF APPLICATION FOR BIOLUBRICANTS

Biolubricants are to be preferred for all applications that may present risks for the environment.

This is the case for:

- Lost oils (chainsaw chain oils, 2-stroke engine oils, formwork release agents and greases)
- Oils that may leak accidentally (hydraulic oils, oils for engines, gearboxes, axles, etc.)

The use of biolubricants is particularly relevant to certain environments in which environmental protection is a constant concern. This is particularly true of aquatic, mountain, agricultural and forest environments.





WHAT IS AN ECOLABEL?

There are several ecolabels designed to differentiate biolubricants from conventional lubricants.

The European Ecolabel is the most widely accepted and Total has chosen to apply it to its products.

The European Ecolabel, identified by the daisy symbol, can only be used on products which satisfy strict criteria for low environmental impact.

It is a label that provides a guarantee of good performance and differentiates genuine biolubricants from oils that are simply biodegradable.

TOTAL is an active participant in research and awareness-raising programmes conducted by national and EU institutions. TOTAL can also propose specific solutions for each of the relevant sectors of activity:

- Water
- Public works
- Mountain areas
- Forestry and farming



BIOLUBRICANTS FOR CLEAN WATER.

► **WATER IS THE SECTOR WITH THE MOST NUMEROUS SOURCES OF OIL-RELATED POLLUTION.**

This applies, for example, to machinery operating in rivers and canals (dredging, bank development work, etc.) and the vessels themselves, whether the application is professional (push-tugs, trawlers, etc.) or recreational (outboard engines, jet skis, etc.). All equipment operating on or near water (canal locks, hydroelectric power stations) is also a source of concern in this respect.

TOTAL can offer a complete range of biolubricants suited to all the above activities.

► **APPLICATIONS:**

- River and coastal fishing
- Coastal and inland marine navigation
- Leisure boating
- Locks and hydroelectric plants



BIOLUBRICANTS FOR A CLEAN ENVIRONMENT.

► Public works machinery often operates in the natural environment on construction sites and in development projects, quarries and urban roadworks.

Accidental spillage of transmission or hydraulic oil can occur during this type of work, and this can be a cause of environmental pollution.

► **CONCERNED WITH PROTECTING THE NATURAL ENVIRONMENT, TOTAL SUPPLIES A RANGE OF BIOLUBRICANTS SUITED TO PUBLIC WORKS AND CONSTRUCTION MACHINERY.**

► **APPLICATIONS:**

- Extraction machinery
- Construction machinery
- Earth-moving machinery
- Drainage cleaning machinery



BIOLUBRICANTS FOR CLEAN MOUNTAINSIDES.

■ Preservation of their environment and keeping the mountain-side "clean" are constant concerns for mountain professionals.

To meet their needs, **TOTAL CAN SUPPLY A RANGE OF BIOLUBRICANTS FOR ALL EQUIPMENT IN CONTACT WITH THE NATURAL ENVIRONMENT:** ski lifts, snow cannons, snowmobiles, snow groomers and other piste maintenance machinery.

This range comprises both transmission and hydraulic oils and greases and 2-stroke engine oils.

■ APPLICATIONS:

- Piste maintenance
- Ski lifts
- Snowmobiles/quad ATVs
- Snow plants



BIOLUBRICANTS FOR CLEAN SOILS.

■ **LUBRICANTS ARE USED IN FORESTRY AND AGRICULTURE FOR SMALL ITEMS OF EQUIPMENT (CHAINSAWS, BRUSH CUTTERS) AND MACHINERY FOR LOGGING (FORWARDERS, LOG LOADERS), SOIL PREPARATION AND HARVESTING.**

Lost oils for chainsaw chains and 2-stroke engines and hydraulic oils can be a source of pollution of the natural forestry or farming environment in the event of accidental leakage. Concerned to protect such natural environments, TOTAL supplies a range of lubricants well suited to these types of equipment and covering the whole range of requirements.

■ APPLICATIONS:

- Forestry work
- Soil preparation
- Agricultural equipment
- Chainsaws, brush cutters



		SPECIFICATIONS							APPROVALS	
		Water	Mountain	Public Works	Forestry/ Farming	Ecolabel	Biodegradable	Fuel ECO		
BIOTRAFFIC 1000 FE	2-stroke engines	✓	✓	✓	✓		●	●	ACEA E7 / E5 / B4 / B3 / A3 API CI-4 / CH-4 / SL JASO DH-1	
NEPTUNA 2T BIO-JET	2-stroke engines	✓	✓		✓		●		NMMA TC-W3 RL API TC	Compliant with the requirements of: • BOMBARDIER • SEA-DOO • EVINRUDE • JOHNSON • KAWASAKI • MERCURY • YAMAHA, etc.
BIOTRANS BV FE 75W-80	Gearboxes		✓	✓	✓		●	●	API GL-4	
BIOTRANS LS FE 75W-90	Axles, reduction drives		✓	✓	✓		●	●	API GL-5 « LS » MIL.L 2105D	
BIOTRANS FX	UTTO		✓	✓	✓		●		API GL-4 ISO 15380: HEES AFNOR HV 68 multigrade	• MASSEY FERGUSON: CMS M 1145/1143 • ZF: TE ML 06P
BIOHYDRAN SE 32 BIOHYDRAN SE 46 BIOHYDRAN SE 68	Saturated hydraulics		✓	✓	✓	●	●		VDMA 24568: HEES ISO 15380: HEES	
BIOHYDRAN TMP 32 BIOHYDRAN TMP 46 BIOHYDRAN TMP 68	Unsaturated hydraulics	✓	✓	✓	✓	●	●		VDMA 24568: HEES ISO 15380: HEES	

APPLICATION

STANDARDS



		SPECIFICATIONS							
		Water	Mountain	Public Works	Forestry/Farming	Ecolabel	Biodegradable	Fuel ECO	
BIOHYDRAN TMP 100	Stern tubes	✓					●		VDMA 24568: HEES ISO 15380: HEES
BIOHYDRAN FG	Food-grade hydraulics				✓		●		NFS-H1 VDMA 24568 (HETG) ISO 15380 (HETG) Poclain Hydraulics 11-06
CARTER BIO 150 CARTER BIO 220 CARTER BIO 320 CARTER BIO 460	Lightly loaded reduction drives		✓	✓	✓		●		
CHAINBIO 100 CHAINBIO 160	Chainsaw chains		✓		✓	●	●		
BIOMULTIS EP 2	Grease	✓	✓	✓	✓	●	●		ISO 6743-9: L-XCEEB2 DIN 51502: KP2K-30
BIOMOLDOL S	Mould release			✓			●		

APPLICATION

STANDARDS

2/ GREASES

► HIGH-QUALITY GREASES

Total is one of the rare oil companies operating plants specializing in the production of greases. Total has a worldwide presence due to its plants based in many countries. They rank among the best in the world today and are considered to be among the most modern.

They are also environmentally friendly (the use of lead and other heavy metals is banned in our products) and discharge no harmful waste.

► A VARIED PRODUCT OFFERING TO MEET OUR CUSTOMERS' DIFFERING NEEDS

Incorrect product recommendation can have serious consequences.

Although a modern multi-purpose grease of superior quality can meet the needs of almost 75% of applications requiring grease lubrication, the remaining 25% demand a large number of special greases.

► A GUARANTEE OF A HIGH-TECHNOLOGY PRODUCT

Substantial **sums** are invested every year in grease development research.

The research laboratory in Solaize (France) uses the highest-performing equipment along with cutting-edge techniques.

And lastly, **laboratory and bench testing and constant contact with equipment manufacturers** enable us to improve our greases constantly and anticipate future needs.



GREASES: A COMPLETE RANGE TO MEET YOUR EVERY NEED

 May suit
 Suitable for
 Recommended

TYPE	RECOMMENDED FOR	SPECIFICATIONS						SPECIFIC FEATURES	DETAILED APPLICATIONS		
		ROLLING BEARINGS	PLAIN BEARINGS	CHASSIS	GREASE TYPE	NLGI GRADE	USE TEMPERATURE (in °C)	VISCOOSITY at 40°C (in cSt)	STANDARDS ISO 6743-9 DIN 51502		
MULTIPURPOSE	 CERAN MM	✓	✓	★★★ ★★★ ★★★	Mineral	2	-30 to +180	110	L-XCFIB 2 KP2R -30	• Extreme pressure	• For ball-, roller- and slide-bearings, standard gaskets and seals, chassis, and all components. • Recommended for "off-road" conditions (vehicles subject to vibration and shock or in frequent contact with water).
	 MULTIS COMPLEX SHD 220	✓		★★★ ★★★ ★★★		2	-50 to +160	220	L-XDEHB 2 KP2P -50	• Cold starting • Extended greasing intervals thanks to its synthetic formula	• For ball-, roller- and slide-bearings, standard gaskets, chassis, and all components.
	 MULTIS COMPLEX HV2	✓	✓	★★★ ★★★ ★★		2	-30 to +160	340	L-XBEHB 2 KP2P -30	• Extreme pressure	• For ball-, roller- and slide-bearings, standard gaskets. • For vehicles subject to high loads or shock/vibration.
	 MULTIS COMPLEX EP 2	✓	✓	★★ ★★ ★★	Mineral	2	-20 to +160	165	L-XBEHB 2 KP2P -20	• Extreme pressure	• For wheel bearings in the transport field. • Also suitable for ball-, roller- and slide-bearings, standard gaskets subject to high loads, shock and vibration.
	 MULTIS COMPLEX EP 3	✓		★★★ ★★ ★★		3	-20 to +160	165	L-XBDHB 3 KP3N -20	• Extreme pressure	• For the lubrication of wheel bearings in severe temperature conditions where Multis Complex EP 2 cannot be used. • Also suitable for the lubrication of ball-, roller- and bush bearings and standard gaskets subject to high loads, shock and vibration.
	 MULTIS EP 2	✓	✓	★ ★ ★		2	-25 to +120	150	L-XBCEB 2 KP2K -25 (1)	• Extreme pressure	• For needle and slide bearings, standard gaskets and equipment chassis subject to shock and vibration.

APPLICATION TYPES

(1) Approvals: MB-Approval 267.0

PRODUCT ADVANTAGES

GREASES: A COMPLETE RANGE TO MEET YOUR EVERY NEED

		RECOMMENDED FOR			SPECIFICATIONS									
TYPE	APPLICATION TYPES	ROLLING BEARINGS	PLAIN BEARINGS	CHASSIS	GREASE TYPE	NLGI GRADE	USE TEMPERATURE (in °C)	VISCOSITY at 40°C (in cSt)	STANDARDS		SPECIFIC FEATURES	DETAILED APPLICATIONS		
									ISO 6743-9	DIN 51502				
HIGH LOAD APPLICATIONS	MULTIS COMPLEX HV2 MOLY		✓		Mineral	2	-30 to +160	340	L-XCEHB2	KPF2P -30	• Extreme pressure	<ul style="list-style-type: none"> For applications involving operation at very high temperatures and loads (rolling bearings, plain bearings). Suitable for applications subject to shock or intensive thermal stress. 		
	MULTIS MS 2		✓			2	-25 to +130	150	L-XBCEB 2	MPF2K -25				
CENTRALIZED GREASING SYSTEMS	MULTIS ZS 000		✓		Synthetic	00/000	-45 to +120	42	L-XECFB000	P00/000K-45	<ul style="list-style-type: none"> Extreme pressure Semi-fluid 	<ul style="list-style-type: none"> For the greasing of vehicle chassis and industrial mechanisms using centralized systems. 		
	MULTIS EP 0	✓	✓	✓		0	-25 to +120	150	L-XBCEB0	MP0K -25				

APPLICATION TYPES

PRODUCT ADVANTAGES

★ May suit
 ★★ Suitable for
 ★★★ Recommended

		RECOMMENDED FOR			SPECIFICATIONS								
TYPE		ROLLING BEARINGS	PLAIN BEARINGS	CHASSIS	GREASE TYPE	NLGI GRADE	USE TEMPERATURE (in °C)	VISCOOSITY at 40°C (in cSt)	STANDARDS	ISO 6743-9	DIN 51502	SPECIFIC FEATURES	DETAILED APPLICATIONS
BIODEGRADABLE	BIOMULTIS SEP2	✓	✓	★★★	Synthetic	2	-35 to 150	95	L-XDDEB 2	KPE2N -35	• Biodegradable • Extreme pressure	• For lubricating rolling bearings, gaskets and plain bearings, especially in agriculture.	
SELLETTE	MULTIS XHV 2	✓		★★★	Mineral	2	-20 to 130	1300	L-XBCHB 2	KP2K -20	• Extreme pressure	• For lubricating truck fifth wheels.	

APPLICATION TYPES

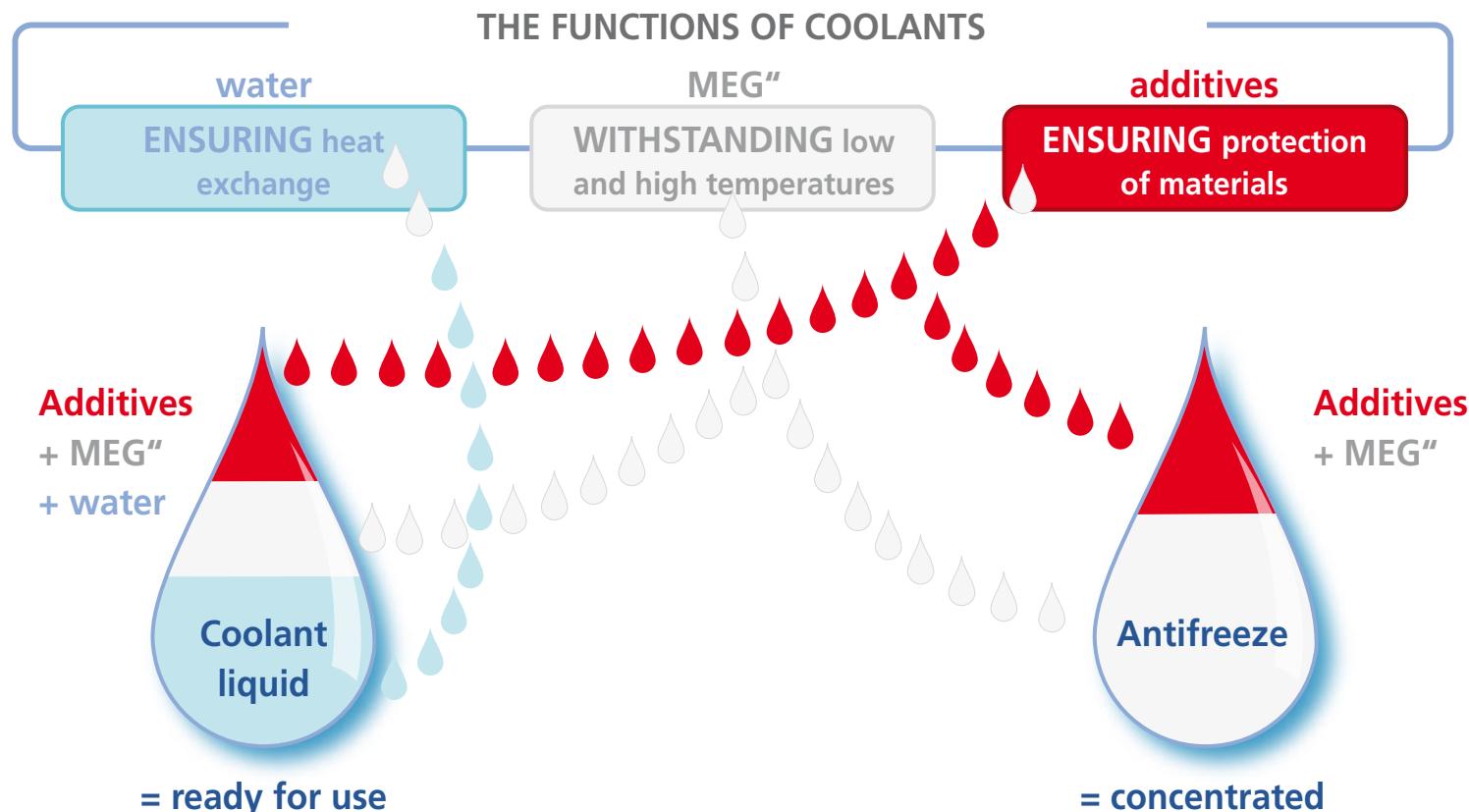
PRODUCT ADVANTAGES

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3/ COOLANTS

→ Coolants help your engine operate correctly by removing surplus heat, thus avoiding overheating and unwanted engine shutdown. Since coolants consist mainly of water, the cooling system's metal parts are at risk of corrosion. That is why coolants are given chemical properties to limit such risks and to prolong engine life.



→ Antifreezes and coolants must never be chosen without careful thought. The coolant helps your engine run properly. To protect your engine from overheating and corrosion, to guarantee it will start in all weathers, you should prefer products of undeniably high quality.



THE COOLANT AND ANTIFREEZE RANGE

RANGE ENTRY	Product	Nature	Composition	STANDARDS		APPROVALS	Product Advantages
				AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	MB-Approval 325.3 • DEUTZ • FORD • GM 6277 M • MAN 324 Typ SNF • AUDI • SEAT • SKODA • VW TL 774 D/F (G12/G12+) • RENAULT TRUCKS		
HIGH-END	GLACELF AUTO SUPRA	Concentrated	Organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	MB-Approval 325.3 • DEUTZ • FORD • GM 6277 M • MAN 324 Typ SNF • AUDI • SEAT • SKODA • VW TL 774 D/F (G12/G12+) • RENAULT TRUCKS		• "Very long duration" antifreeze, 100% organic additivation, recommended for all passenger cars, heavy trucks, public works machinery and agricultural tractors.
	COOLELF AUTO SUPRA -26°C	Diluted	Organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	MB-Approval 326.3 • DEUTZ • FORD • MAN 324 Typ SNF • AUDI • SEAT • SKODA • VW TL 774 D/F (G12/G12+) • RENAULT TRUCKS		• "Very long duration" antifreeze, 100% organic additivation, recommended for all ICEs in passenger cars, heavy trucks, public works machinery and farm tractors.
	COOLELF AUTO SUPRA -37°C	Diluted	Organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	MB-Approval 326.3 • DEUTZ • FORD • MAN 324 Typ SNF • AUDI • SEAT • SKODA • VW TL 774 D/F (G12/G12+) • RENAULT TRUCKS		• "Very long duration" antifreeze, 100% organic additivation, recommended for all ICEs in passenger cars, heavy trucks, public works machinery and farm tractors.
MID-RANGE	GLACELF PLUS	Concentrated	Semi-organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	BMW • PORSCHE • AUDI • SEAT • SKODA • VW TL 77 4C (G11)		• "Very long duration" antifreeze, semi-organic additivation, recommended for all ICE cooling systems in passenger cars, heavy trucks, public works machinery and farm tractors.
	COOLELF PLUS -26°C	Diluted	Semi-organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	BMW • PORSCHE • AUDI • SEAT • SKODA • VW TL 77 4C (G11)		
	COOLELF PLUS -37°C	Diluted	Semi-organic	AFNOR NFR 15-601 ASTM D3306/D4656/D4985 BS 6580	BMW • PORSCHE • AUDI • SEAT • SKODA • VW TL 77 4C (G11)		
	GLACELF MDX	Concentrated	Semi-organic	AFNOR NFR 15-601 BS 6580	MB- Approval 325.0 • MAN 324 Typ NF • MTU-MTL 5048 • DEUTZ & DEUTZ MWM		
RANGE ENTRY	COOLELF MDX -37°C	Diluted	Semi-organic	AFNOR NFR 15-601 BS 6580	MB- Approval 326.0 • MAN 324 Typ NF • MTU-MTL 5048 • DEUTZ & DEUTZ MWM		
	GLACELF CLASSIC	Concentrated	Mineral	AFNOR NFR 15-601 BS 6580			
	COOLELF CLASSIC -26°C	Diluted	Mineral	AFNOR NFR 15-601 BS 6580			

COMPOSITION

APPROVALS

4/ HYDRAULIC AND BRAKE FLUIDS

MANUFACTURER APPROVALS			
FLUIDE LDS		<ul style="list-style-type: none"> Orange-coloured synthetic hydraulic fluid for hydraulic power units in Citroën vehicles with "HYDRAActive 3" such as the Citroën C5. Do not use where a fluorescent green colour mineral fluid is recommended (TOTAL LHM PLUS). 	<ul style="list-style-type: none"> PSA PEUGEOT-CITROËN S71 2710
FLUIDE DA		<ul style="list-style-type: none"> Orange synthetic fluid for power steering in Peugeot, Citroën or Renault private passenger vehicles where the manufacturer recommends this fluid. Do not use where a fluorescent green colour mineral fluid is recommended (TOTAL LHM PLUS). Recommended for "extreme cold" applications. 	<ul style="list-style-type: none"> PSA PEUGEOT-CITROËN S71 2710 MAN 3289 RENAULT PSFRLT
LHM PLUS		<ul style="list-style-type: none"> Mineral hydraulic fluid for hydraulic power units in Citroën XM, XANTIA, BX, CX, SM, GS; for hydraulic power units in Citroën ID and DS sold after September 1966 (components painted green); for brake circuits and hydraulic clutch control systems in utility vehicles Citroën N, P and C35; for the Peugeot 405X4 vehicle level adjuster. Not miscible and not compatible with some synthetic fluids. 	<ul style="list-style-type: none"> PSA PEUGEOT-CITROËN S71 2710

APPLICATIONS

			STANDARDS
TOTAL HBF 5.1		<ul style="list-style-type: none"> Hydraulic fluid recommended for brake circuits in all vehicles using synthetic fluids where DOT 5.1 level is required and especially for vehicles operating in very severe conditions. It is used in competition. Miscible with other synthetic fluids of chemical type such as DOT 3, DOT 4 and DOT 5.1. Not miscible with mineral base fluids of LHM type and fluids of DOT 5 type with silicon. 	<ul style="list-style-type: none"> SAE J 1704 ISO 4925 Class 5.1 FMVSS 116 DOT 5.1
TOTAL HBF 4		<ul style="list-style-type: none"> Hydraulic fluid recommended for brake circuits and clutch systems in all vehicles using synthetic fluid and requiring DOT 4 level. Miscible with other synthetic fluids of chemical type such as DOT 3, DOT 4 and DOT 5.1. Not miscible with mineral base fluids of LHM type or silicon based fluids. 	<ul style="list-style-type: none"> SAE J 1704 ISO 4925 Class 4 FMVSS 116 DOT4
TOTAL HBF 3		<ul style="list-style-type: none"> Hydraulic fluid recommended for brake circuits and clutch systems in all vehicles using synthetic fluid and requiring DOT 3 level. Miscible with other synthetic fluids of chemical type such as DOT 3, DOT 4 and DOT 5.1. Not miscible with mineral base fluids of LHM type or silicon based fluids. 	<ul style="list-style-type: none"> SAE J 1703 ISO 4925 Class 3 FMVSS 116 DOT3

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