



**Your lubricants and specialties range for
On Road Heavy Duty vehicles**



TotalEnergies



Contents

RUBiA

LUBRICANTS

Cutting edge R&D in lubricant innovation for over 60 years

TotalEnergies is a leading global manufacturer and marketer of lubricants, with 42 production sites around the world and more than 5,800 employees in 160 countries. TotalEnergies' lubricants division offers innovative, high-performance and environmentally friendly products and services, developed by its R&D centers, which employ over 130 researchers. TotalEnergies' lubricants division is a key partner for players in the automotive, industrial and marine markets.

A leading global energy company

TotalEnergies' Marketing & Services business segment offers its professional and private customers a wide range of broad energy products and services—petroleum products, biofuels, charging and related services for electric vehicles, gas for road and maritime transportation—to support them in their mobility and help them reduce their carbon footprint. Every day, over 8 million customers visit our 16,000 service-stations all over the world. As the world's number four in lubricants, we design and sell high-performance products for the automotive, industrial and maritime sectors. And to provide the best response to the needs of our B2B customers, we deploy our sales forces, our international logistics network and our diverse offering. We operate in 107 countries, where our 31,000 employees stand close to all of our customers.

TotalEnergies, a global multi-energy compagny

TotalEnergies is a global multi-energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity. Our 105,000 employees are committed to energy that is ever more affordable, cleaner, more reliable and accessible to as many people as possible. Active in more than 130 countries, TotalEnergies puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

Engine oil technology approved by truck manufacturers

200+
APPROVALS
FROM
HEAVY VEHICLE MANUFACTURERS*

*For Rubia range in its entirety

Rubia products are tested and approved more than 200 times by Major Heavy Vehicle Manufacturers

(Original Equipment Manufacturers -OEMs-)

These product approvals are the guarantee certificates proving that Rubia products are 100% compatible with the engine technology of the related manufacturers.

Premium products and tailor-made solutions to increase your operational efficiency

TotalEnergies increases uptime and lower maintenance costs, thanks to its Rubia premium engine oil range, tested in real world conditions during fleet tests and approved by Heavy Vehicle Manufacturers, and its LubAnac Fleet Management System, based on used oil analysis supported by its technical services team on the field.

TotalEnergies develops tailor-made lubricants in its state of art R&D center in France. Products are developed in close collaboration with heavy vehicle manufacturers in order to match their sophisticated and most demanding technical requirements.



Rubia takes care of your engine



Engine Longevity: Protection against mechanical wear

Rubia products are developed with special molecules forming a strong film over metal surfaces, reducing mechanical wear in the presence of high pressure and extreme temperatures, improving engine longevity.



Smoother and efficient engines: Better engine cleanliness

Rubia's advanced active molecules prevent formation of harmful deposits by keeping them dispersed. The products improve the longevity of the engine and make it run in a smoother and more efficient way.



Longer oil change intervals: Resistance against oxidation

Synthetic base oils with outstanding anti-oxidant additives increase Rubia products' resistance to oxidation, even under extreme temperatures, thus extending oil drain intervals.



Lower Oil Consumption: Better wear protection and engine cleanliness

Rubia products with special anti-wear additives minimize the amount of engine oil entering the combustion chamber and, by that, reduce oil consumption.



Equipment Longevity, reduced maintenance costs: Compatibility with exhaust gas after treatment systems

With their (low sulphated ash, phosphorus and sulphur) technology, Rubia products prevent the clogging of diesel particulate filters (DPFs) and protect diesel engines equipped with post-treatment systems, reducing maintenance costs and protecting the environment.

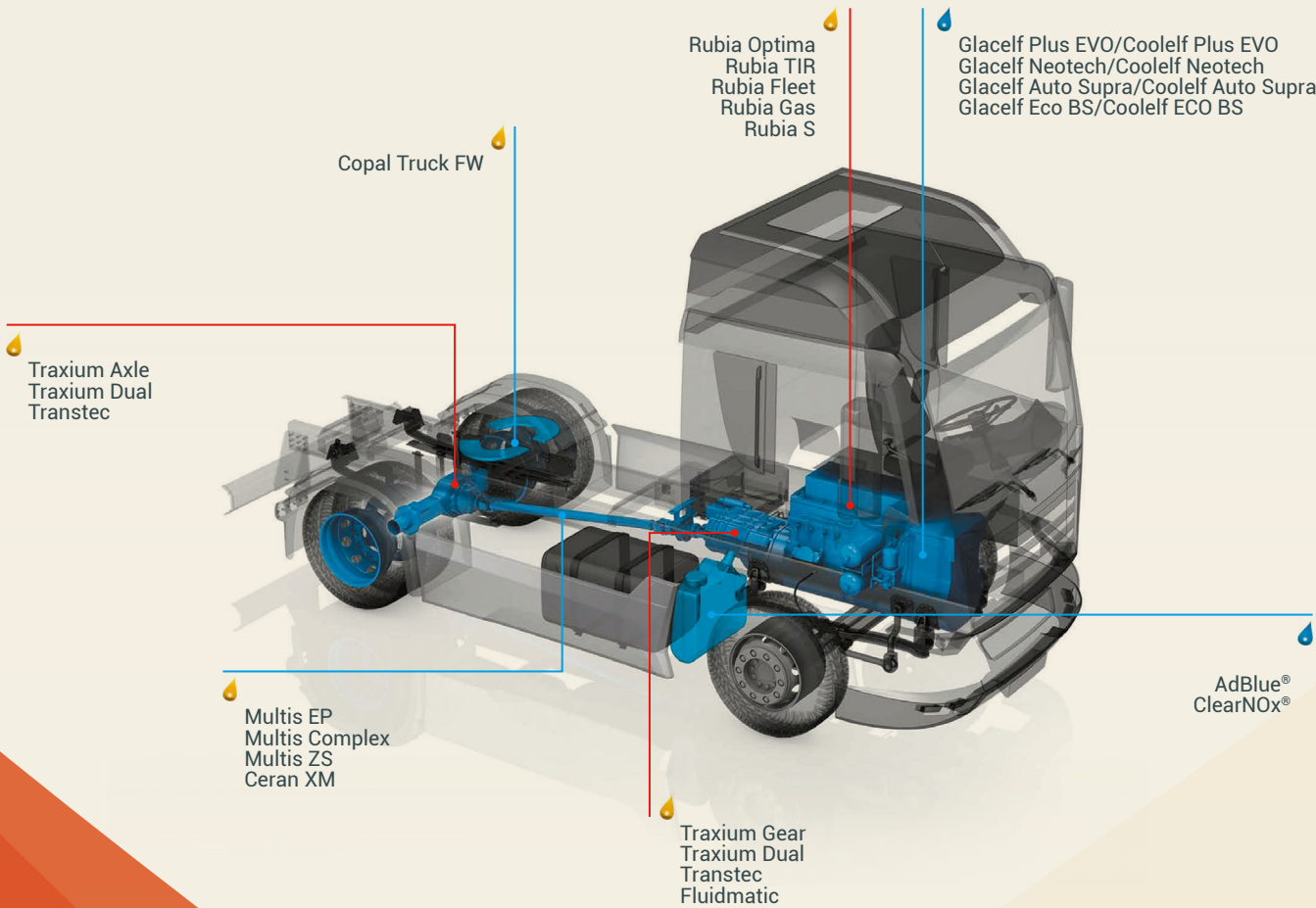


Fuel economy properties: Excellent protection even with low viscosities

Engine oils can provide Fuel Economy gains via viscosity control and friction reduction. Lowering the lubricant's viscosity reduces the overall friction in the engine, delivering Fuel Economy benefits. Rubia FE range is approved by Heavy Vehicle Manufacturers for use in their engines to achieve their FE targets.



A complete range of products for your vehicle



Rubia Optima with Inno-Boost Technology



Ready for the next chapter of engine technology

Rubia products offer excellent engine and after treatment systems protection, with extended drain intervals, for the latest, cleaner engines.

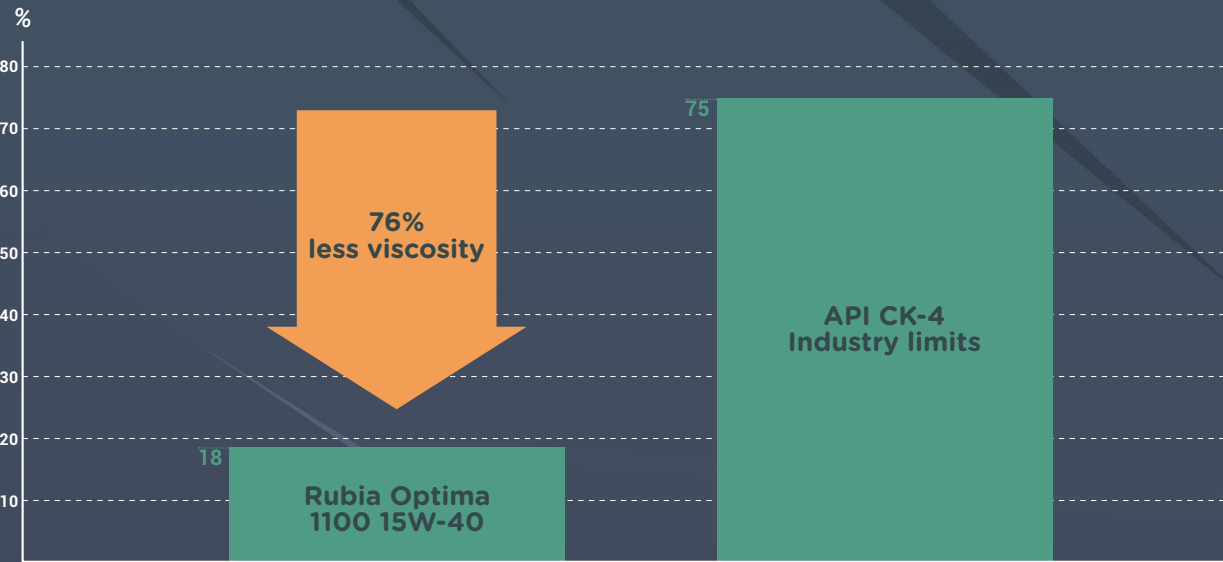
Benefits of using Rubia Optima with Inno-Boost technology

- Increased uptime and lower maintenance costs
- Exceed API CK-4 and FA-4 specifications
- Longer engine oil life
- Excellent equipment longevity

Rubia Optima products, formulated with Inno-Boost Technology, incorporate right combination of strong anti-oxidant molecules. These active molecules inhibit the radical formation and keep hydrocarbon chains intact. As a result, the engine oil viscosity remains stable and engine oil keeps its properties for longer time.

Up to 76% improvement against oil viscosity increase compared to API CK-4 Industry Limits.*

*Volvo T13 Test (KV 40 Viscosity Increase 300-360h)



Rubia Optima with Inno-Boost technology is engineered and approved for the latest technology engines and offers excellent engine longevity with extended oil drain intervals.

200+ APPROVALS
FROM
HEAVY VEHICLE MANUFACTURERS*



*For Rubia range in its entirety

- Low SAPS range:**
- API FA-4 specification. For newer engines with limited backward compatibility (Please follow manufacturer specifications)
 - API CK-4 specification. Surpassing API CJ-4, can be used as a replacement of your current oil
 - Newest ACEA E8 and E11 specifications
 - Special Fuel Economy and Extra Fuel Economy products

Product name	Viscosity	Base Oil Technology	Fuel Economy	International norms	Mercedes Benz	Scania	MAN	Volvo	Renault Trucks	Cummins	DAF	Others
Rubia Optima 5100 XFE	5W-20	Fully Synthetic	EXTRA			LDF-5	M 3977					
Rubia Optima 4100 XFE	5W-30	Fully Synthetic	EXTRA	API FA-4	DTFR 15C130 (228.61)			VDS-5	RLD-5			Mack EOS-5
Rubia Optima 3500 FE	5W-30	Fully Synthetic	✓	ACEA E4, E6, E7, E8, E9, E11 API CK-4/CJ-4/CI-4/CH-4	DTFR 15C110 (228.51) DTFR 15C120 (228.52)	LDF-4	M 3677 M 3777 M 3477* M 3271-1*	VDS-4.5	RLD-3	CES 20086	PSQL 2.1E LD*	Mack EOS-4.5, Ford WSS-M2C213-A1*, IVECO TLS E6**
Rubia Optima 3500	10W-40	Fully Synthetic		ACEA E4, E6, E7, E8, E9, E11 API CK-4/CJ-4/CI-4/CH-4	DTFR 15C110 (228.51) DTFR 15C120 (228.52)		M 3775 M 3477* M 3271-1*	VDS-4.5	RLD-3	CES 20086	PSQL 2.1E LD*	Mack EOS-4.5, IVECO FPT TLS CK-4/18-1809 CLASSE NG2**

*Meets the requirements of
**Suitable for

Product name	Viscosity	Base Oil Technology	Fuel Economy	International norms	Mercedes Benz	Scania	MAN	Volvo	Renault Trucks	Cummins	DAF	Others
Rubia Optima 3100 FE	10W-30	Synthetic Technology	✓	ACEA E6, E7, E8, E9, E11 API CK-4/CJ-4/CI-4/CH-4/SN	DTFR 15C110 (228.51) DTFR 15C120 (228.52)		M 3477* M 3271-1*	VDS-4.5	RLD-3	CES 20086	PSQL 2.1E LD*	Mack EOS-4.5, DETROIT DIESEL 93K222*, IVECO**
Rubia Optima 3100	10W-40	Synthetic Technology		ACEA E6, E7, E8, E9, E11 API CK-4/CJ-4/CI-4/CH-4/SN	DTFR 15C110 (228.51) DTFR 15C120 (228.52)		M 3477* M 3271-1*	VDS-4.5	RLD-3	CES 20086	PSQL 2.1E LD*	Mack EOS-4.5, DETROIT DIESEL 93K222, IVECO FPT TLS CK-4/ FPT TLS E9**
Rubia Optima 2100 XFE	10W-30	Synthetic Technology	EXTRA	API FA-4						CES 20087		DETROIT DIESEL 93K223, FORD WSS-M2C 214-B1*
Rubia Optima 1300	15W-40	Synthetic Technology		ACEA E7, E9, E11 API CK-4/CJ-4/CI-4+/CI-4/CH-4	DTFR 15C100 (228.31)			VDS-4.5	RLD-3	CES 20086	DAF*	DETROIT DIESEL 93K222, FORD WSS-M2C 171-F1, Mack EOS-4.5, IVECO*
Rubia Optima 1300 FE	10W-30	Synthetic Technology	✓	ACEA E7, E9, E11 API CK-4/CJ-4/CI-4+/CI-4/CH-4	DTFR 15C100 (228.31)			VDS-4.5	RLD-3	CES 20086	DAF*	DETROIT DIESEL 93K222, FORD WSS-M2C 171-F1, Mack EOS-4.5, IVECO*
Rubia Optima 1100 FE	10W-30	Conventional	✓	ACEA E7, E9, E11 API CK-4/CJ-4/CI-4+/CI-4/CH-4	DTFR 15C100 (228.31)			VDS-4.5	RLD-3	CES 20086	PSQL 2.1E*	DETROIT DIESEL 93K222, FORD WSS-M2C 171-F1, Mack EOS-4.5, IVECO*
Rubia Optima 1100	15W-40	Conventional		ACEA E7, E9, E11 API CK-4/CJ-4/CI-4+/CI-4/CH-4/ SN	DTFR 15C100 (228.31)			VDS-4.5	RLD-3	CES 20086	DAF*	DETROIT DIESEL 93K222, FORD WSS-M2C 171-F1, Mack EOS-4.5, IVECO*

*Meets the requirements of
**Suitable for

DTFR previously known as Mercedes Benz Approval

Rubia TIR with Pro-Efficient Technology



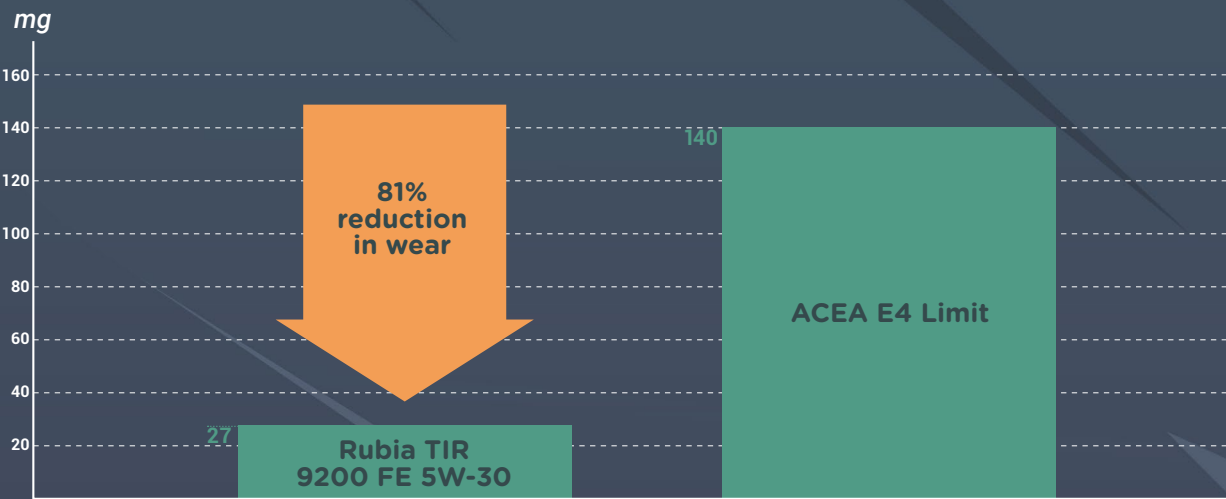
Protection approved by professionals, for maximum efficiency

Rubia TIR products are approved by Heavy Vehicle Manufacturers for the great majority of the existing truck park, with a very wide coverage from the most demanding EURO VI engines to conventional EURO III engines. The Pro-Efficient Technology, developed by TotalEnergies Research and Development teams, protects and improves the efficiency of professional engines by ensuring reduced mechanical wear and extended oil drain intervals. Meaning longer engine life, less breakdowns and reduced maintenance costs. In other words, increased efficiency and profitability for your business.

Benefits of using Rubia with Pro-Efficient technology

- Increased uptime and lower maintenance costs
- Outstanding protection against mechanical wear
- Longer Engine Life
- Lower oil consumption

*OM 646LA Test (Cam Wear Outlet)



Rubia TIR with Pro-Efficient technology
was developed closely with professionals. It increases efficiency and profitability of your business by providing excellent engine protection for the majority of the existing truck park – from Euro VI to Euro III engines.

200+
APPROVALS
FROM
HEAVY VEHICLE
MANUFACTURERS*

*For Rubia range in its entirety



- Standard SAPS range:**
- OEMs Approved
 - API CI-4 / CI-4+ and ACEA E4, E7 specifications
 - Outstanding protection against mechanical wear
 - Longer Engine Life

Product name	Viscosity	Base Oil Technology	Fuel Economy	International norms	Mercedes Benz	Scania	MAN	Volvo	Renault Trucks	Cummins	DAF	Others
Rubia TIR 9200 FE	5W-30	Fully Synthetic	✓	ACEA E4, E7	DTFR 15B120 (228.5)	LDF-3	M 3277	VDS-3	RLD-2	CES 20077* CES 20076*	DAF*	ISUZU ¹ , Voith Class A, Mack EO-N, IVECO TFE*
Rubia TIR 8800	10W-40	Synthetic Technology		ACEA E4 API CI-4/CH-4	DTFR 15B120 (228.5)		M 3277	VDS-3	RLD-2	CES 20078*		Mack EO-N
Rubia TIR 8600	10W-40	Synthetic Technology		ACEA E4, E7 API CF	DTFR 15B120 (228.5)	LDF-3	M 3277	VDS-3	RLD-2 RXD*		DAF*	Voith Class A**, Mack EO-N, IVECO T3 E4**
Rubia TIR 7800	15W-40	Conventional		API CI-4 +/CI-4/ CH-4/SL	DTFR 15B110 (228.3)		M 3275*	VDS-3	RLD-2	CES 20078*		Mack EO-N, Detroit Diesel 93K214*
Rubia TIR 7400 FE	10W-30	Conventional	✓	ACEA E7 API CI-4/CH-4	DTFR 15B110 (228.3)		M 3275*	VDS-3	RLD-2	CES 20078		Mack EO-N, Detroit Diesel 93K215*
Rubia TIR 7400	10W-40	Conventional		ACEA A3/B4, E7 API CI-4/CH-4/ SJ	DTFR 15B110 (228.3) MB 229.1*		M 3275*	VDS-3	RLD-2	CES 20078*		KAMAZ, Mack EO-N
	15W-40	Conventional		ACEA E7 API CI-4/CH-4/ SL	DTFR 15B110 (228.3)	SCANIA*	M 3275*	VDS-3	RLD-2	CES 20078	DAF*	ISUZU (For transfer case only) ¹ , ISUZU**, Mack EO-N, IVECO T2 E7*
	20W-50	Conventional		ACEA E7 API CI-4/SL	DTFR 15B110 (228.3)	SCANIA**	M 3275*	VDS-3**	RLD-2**	20078**	DAF**	ISUZU**, IVECO**, Mack EO-N**

*Meets the requirements of
**Suitable for
¹ Please refer to the latest ISUZU Recommend Lubricant List to verify the homologation year validity.
DTFR previously known as Mercedes Benz Approval

Rubia Fleet with Clean-Shield Technology



Performance exceeding automotive industry standards

Rubia Fleet range is designed for high mileage trucks operating in very difficult road and fuel conditions. Rubia Fleet products exceed the performance standards defined by the American Petroleum Institute (API) and the European Automobile Manufacturers' Association (ACEA), and meet the requirements of major Heavy Vehicle Manufacturers. Thanks to their Clean-Shield Technology, Rubia Fleet products keep engines cleaner even in the presence of hi-sulphur fuels, ensuring engine protection against mechanical wear and making engines run more smoothly for a longer time.

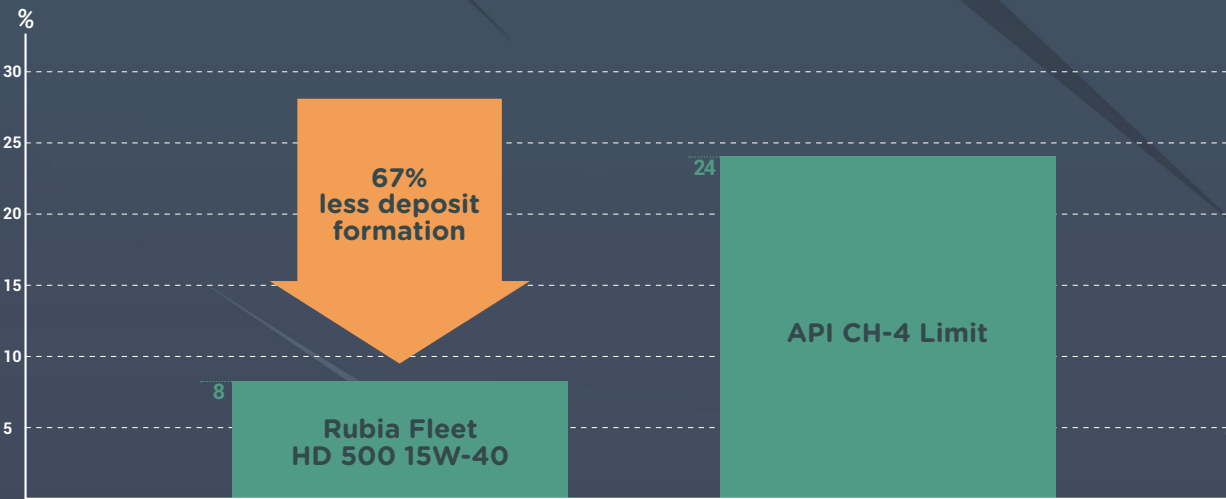
Benefits of using Rubia Fleet with Clean-Shield technology

- Keeps engine parts clean
- Exceeds API and ACEA Specifications
- Longer engine life
- Lower oil consumption

The Rubia Fleet range, using high level of active detergent molecules, will allow to neutralize acidic species and protect the engine against corrosion. Clean-Shield Technology with its high TotalEnergies Base Number (TBN) content is specially designed to keep the engine parts clean and to ensure protection against corrosion and wear, making your engines run more smoothly for longer time.

Up to 67% less deposit formation compared to API CH-4 Industry Limits.*

*Cat 1K Test (Top groove fill)



Rubia Fleet with Clean-Shield technology is engineered for high mileage trucks operating in very difficult conditions, and keeps engines cleaner even in the presence of hi-sulphur fuels.



High mileage vehicles range:
- Keeps engine parts clean
- Exceeds API and ACEA specifications

Product name	Viscosity	API	Mercedes Benz	MAN	Volvo	Renault Trucks	Mack
Rubia Fleet HD 500	10W-30	CH-4/SJ	MB 228.1*	M 3275*	VDS-2*	RD/RD-2*	EO-M*
	15W-40						
	20W-50						
Rubia Fleet HD 400	15W-40	CG-4/SH	228.1*	271*	VDS*		EO-L*
	20W-50						
Rubia Fleet HD 300	10W-30	CF-4/SG	228.1*	271*	VDS*		
	15W-40						
	15W-50						
	20W-50						
Rubia Fleet HD 200	15W-40	CF/SF					
	20W-40						
	20W-50						
	SAE 10W						
	SAE 30/40/50						

*Meets the requirements of

Rubia Gas

Anti-Nitration Technology



Rubia Gas

Specially developed for Natural Gas Engines:

- Cleaner spark plugs
- Fuel Economy
- Optimized engine durability



Product name	Viscosity	Fuel Economy	Low SAPS	API	Volvo	Renault Trucks	Cummins	Mack	Detroit Diesel
Rubia Gas 9M FE	10W-30	✓	✓	CK-4/SN	VDS-4.5	RLD-3	CES 20092 CES 20086	EO-S 4.5	DFS 93K222
Rubia Gas 9M	15W-40		✓	CK-4/SN	VDS-4.5	RLD-3	CES 20092 CES 20086	EO-S 4.5	DFS 93K222
Rubia Gas 7M	15W-40		✓				CES 20085*		
Rubia Gas 5M	15W-40		✓				CES 20074		
	20W-50		✓				CES 20074*		

*Meets the requirements of
**Suitable for

Rubia S

Multi-application range:

- Developed for all turbocharged or normally aspirated engines in trucks and buses
- Also suitable for gearboxes, torque converters, hydraulic systems when the manufacturer requires a motor oil of the appropriate quality for these applications



Product name	Viscosity	API
Rubia S	10W	API CF/SF
	20W-20	
	SAE 30	
	SAE 40	
	SAE 50	

Rubia Fuel Economy



Rubia Fuel Economy products are specially formulated to maximize fuel economy properties without compromising on the engine protection.

Why would you choose Rubia Fuel Economy engine oil?

Over 20 years of Fuel Economy Experience
TotalEnergies has been developing FE products since the 1990's. Today, a third of TotalEnergies engine oils sold worldwide is formulated with FE technology

Fuel Economy Partnerships with OEMs
Rubia Fuel Economy range is developed in close cooperation with key OEMs. Therefore, the range is fully approved for use in their engines to achieve FE targets of the OEMs.

Fuel Economy Lubricants for every application
Our wide range of FE solutions are suited for every application, including engines, gearboxes and axles.

Tested on Real Roads and Certified for Fuel Savings
TotalEnergies Fuel Economy lubricants are tested on actual fleets operating in real-world conditions, and certified by independent testing organizations such as TÜV Rheinland, UTAC, and Millbrook.

Transmission Oil, the secret of your tranquility



GET INSIDE A COMPLETE RANGE OF HIGH-TECH LUBRICANTS

The driveline is an essential element of your vehicle that requires optimal lubrication to exploit its full potential. This is why our lubricants are continuously evolving over time to accompany the evolution of gearboxes and axles technologies. As a result, we offer a full range of high-tech lubricants dedicated to axles, manual and automatic transmissions.

Traxium
Fluidmatic
Transtec



TRAXIUM

TRAXIUM advanced range for manual transmissions and axles

Range	Product name	Viscosity	API	SAE	ZF	Mercedes Benz	Scania	MAN	Volvo	DAF	Meritor	Others
TRAXIUM 9	TRAXIUM DUAL 9 FE	75W-90	GL-4 GL-5 MT-1	J2360	02B/05A/ 12L/12N 16F/17B/ 19C/21A	DTFR 12B140 (235.8)	STO 1:1 G STO 2:0 A FS STO 1:0*	341 Type Z-2 342 Type S-1 341 Type GA-1	97312	DAF	O-76N	IVECO RAS1, Mack GO-J Plus
	TRAXIUM GEAR 9 FE	75W-80	GL-4		01E/02E/16P	DTFR 13D120 (235.29)		341 Type Z5/341 Type VR	97307			IVECO MGS2, Voith Oil Class C
		75W-90	GL-4			DTFR 13B110 (235.11)						
	TRAXIUM GEAR 9V FE	75W-90	GL-4						97315			
	TRAXIUM GEAR 9 SG	75W-90	GL-4				STO 2:0 G	341 GA2				
	TRAXIUM AXLE 9 FE	75W-140	GL-5 J2360	SAE J2360			STO 2:0 A				O-76M	
TRAXIUM 8	TRAXIUM DUAL 8 FE	80W-90	GL-4 GL-5 MT-1	J2360	05A/12L/ 12M/16B 17B/19B 21A	DTFR 12B110 (235.20)	STO 1:0	341 Type GA-1 342 Type M-3			O-76D	Mack GO-J
	TRAXIUM GEAR 8 FE	SAE 40	MT-1									Mack TO-A Plus, EATON PS-386 / PS-164 REV 7, Navistar MPAPS B-6816 Type II
	TRAXIUM GEAR 8 FE	75W-80	GL-4		01L/02L/16K			341 Type Z4		DAF		Iveco MGS1
	TRAXIUM AXLE 8 FE	75W-140	GL-5 J2360	J2360			STO 1:0					
	TRAXIUM AXLE 8	75W-90	GL-5									
	TRAXIUM AXLE 8 FE	80W-140	GL-5 MT-1		05A/12M 16D/21A		STO 1:0					
TRAXIUM 7	TRAXIUM GEAR 7	80W-85	GL-4		17A	DTFR 13B100 (235.1)		341Type E1				
		80W-90	GL-4		16A/17A/19A	DTFR 13B100 (235.1)		341Type E1				
		85W-90	GL-4		16A/17A/19A	DTFR 13B100 (235.1)		341Type E1				
	TRAXIUM AXLE 7	80W-90	GL-5		05A/12E 16B/17B 19B/21A			341 Type M1* 342 Type M2	97306			IVECO RAM1
		85W-140	GL-5		05A/12E 16D/21A							IVECO RAM2
		85W-90	GL-5		16C/17B 19B/21A	DTFR 12B100 (235.0)		342 Type M1*				

*Meets the requirements of
**Suitable for

DTFR previously known as Mercedes Benz Approval

TRANSTEC

Middle range for manual gearboxes and axles

Range	Viscosity	API	Durability	Gear shifting	Extreme pressure
TRANSTEC 5	75W-90	GL-5	✓		✓
	80W-90				
	85W-90				
	85W-140				
	SAE 90				
	SAE 140				
TRANSTEC 4	75W-90	GL-4	✓	✓	
	80W-90				
	85W-90				
	85W-140				
	SAE 90				
	SAE 140				
	SAE 80W				

FLUIDMATIC

Advanced range for automatic gearboxes

Range	ZF	Allison	Mercedes Benz	MAN	VOITH	Volvo
FLUIDMATIC SYN T668		TES 668 TES 295**				97340**
FLUIDMATIC XLD FE	ZF TE-ML 04D/14B/20B/25B, ZF TE-ML 05L/09/11A/11B/ 16L/ 17C**	C4 (TES-228) TES-386** TES-295**	DTFR 13C170 (236.9) MB 236.6*, MB 236.1** MB 236.2** MB 236.5** MB 236.7** MB 236.10** MB 236.11** MB 236.81**	339 Type V1/V2/Z2/Z11 339 Type L1**	H55.6336.xx H55 6335.xx	97341 97340**
FLUIDMATIC D2	ZF TE-ML 03D/04D/14A/17C Bosch TE ML 09* ZF TE-ML 05L/11/21L**	C4 (TES-228)*	DTFR 13C120 (236.9) MB 236.2** MB 236.5** MB 236.6** MB 236.7** MB 236.8** MB 236.10**	339 Type V1/Z1 339 Type L1/L2**	H55.6335.xx	97341 97340* 97325** 97335** 97337**
FLUIDMATIC D3	ZF TE-ML 04D/14A Bosch TE ML 09* ZF TE-ML 05L/11/21L**	C4 (TES-228)*	DTFR 13C170 (236.9) MB 236.2** MB 236.5** MB 236.6** MB 236.7** MB 236.8** MB 236.10**	339 Type V1/Z1 339 Type L1/L2**	H55.6335.xx*	97341 97340* 97325** 97335** 97337**

*Meets the requirements of
**Suitable for

DTFR previously known as Mercedes Benz Approval

Coolants



Coolants help your engine operate efficiently by removing surplus heat, thus avoiding overheating and unwanted engine shutdown.

Long life/Antifreeze coolants with a cutting-edge silicate inhibitor technology with phosphate supported by a robust organic backbone.

Range	Nature	Mercedes Benz	MAN	Ford	Deutz
GLACELF PLUS EVO	Concentrate	DTFR 29C120 (325.5)	MAN 324 Type NF/324 Type Si-OAT*	ESD-M97B49-A*	DQC CA-14*
COOLELF PLUS EVO -26°C	Ready mix	DTFR 29D120 (326.5)			
COOLELF PLUS EVO -37°C	Ready mix				

*Meets the requirements of
DTFR previously known as Mercedes Benz Approval

Long life antifreeze/coolants based on Organic Additive Technology (OAT) that provides year-round protection against corrosion, freeze and boiling.

Range	Nature	Volvo	Renault Trucks	Deutz	Others
GLACELF NEOTECH	Concentrate	VCS-2*	RTCS-2*	DQC CB-14*	MB 325.3**
COOLELF NEOTECH -26°C	Ready mix				MB 326.3** MAN 324 Type SNF** Ford WSS-M97B44-D**
COOLELF NEOTECH -37°C	Ready mix				

*Meets the requirements of
**Suitable for DTFR previously known as Mercedes Benz Approval

“Very long life” antifreeze based on high purity mono ethylene glycol and organic corrosion inhibitor technology.

Range	Nature	Mercedes Benz	MAN	Renault Trucks	Ford	Deutz	Others
GLACELF AUTO SUPRA	Concentrate	DTFR 29C110 (325.3)	Type SNF	41-01-001/-S*	WSS-M97B44-D	DQC CB-14	Cummins CES 14439, DAF 74002, Mack 014 GS 17009, Cummins CES 14603*, Iveco 18-1830*

*Meets the requirements of
**Based on an approved formula

Coolants

"Very long life" coolant based on high purity mono ethylene glycol and organic corrosion inhibitor technology.

Range	Nature	Mercedes Benz	MAN	Renault Trucks	Ford	Deutz	Others
COOLELF AUTO SUPRA -26°C	Readymix	DTFR 29D110 (326.3)	MAN 324 Type SNF	41-01-001/-S*	WSS-M97B44-D	DQC CB-14	Cummins CES, DAF 740002, Mack 014 GS 17009, Iveco 18-1830*
COOLELF AUTO SUPRA -37°C							

*Meets the requirements of DTFR previously known as Mercedes Benz Approval

Cost-effective universal engine cooling solution with organic additives.

Range	Nature	Composition	International standard
GLACELF ECO BS	Concentrated	Organic	BS 6580 NF R 15-601
COOLELF ECO BS	Ready mix		

Greases



Greases provide outstanding protection of your equipment. Thanks to their excellent mechanical and thermal stabilities, they extend the service life of your heavy duty vehicles.

Multis range is the good solution against wear, rust and water wash-out in standard operating conditions. Multis Complex range is a better choice in severe operating conditions such as high temperatures and heavy loads.

Ceran range is the ultimate solution in extreme conditions like very high heavy loads and very high temperatures. They have exceptional water resistance properties.

Copal Truck FW has been specially developed for Fifth Wheel Coupling. It is the best choice against dust, water ingress and metal to metal contacts.

Application	Product	NLGI Grade	Thickener	Color	Dropping point (°C)	Kinematic viscosity of the base oil at 40°C (mm²/s) ASTM D445	Base oil type	International specifications ISO 6743-9	International specifications DIN 51502
Lithium/Calcium Multipurpose grease, with Extreme Pressure properties, NLGI grade 00.	Multis EP 00	00	Lithium/Calcium	Pale brown	>160	150	Mineral	L-XBCEB 000	GP00G-35
Lithium/Calcium Multipurpose grease, with Extreme Pressure properties, NLGI grade 2.	Multis EP 2	2	Lithium/Calcium	Brown	>190	150	Mineral	L-XCCEB 2	KP2K-30
Lithium Complex grease, with Extrem-Pressure properties, NLGI grade 2.	Multis Complex EP 2	2	Lithium complex	Red	>275	165	Mineral	L-XBEHB 2	KP2P-25
Lithium Complex grease, dedicated to Heavy-Duty, NLGI grade 2.	Multis Complex MHD 220	2	Lithium complex	Dark Blue	>260	220	Mineral	L-XBEHB 2	KP2P-20
Lithium Complex grease, synthetic based, dedicated to low temperature application, NLGI grade 2.	Multis Complex SHD 220	2	Lithium complex	Yellow	>275	220	PAO	L-XEEHB 2	KP2P-50
Lithium/Calcium grease, dedicated to Central Lubrication System, NLGI grade 000.	Multis ZS 000	000	Lithium/Calcium	Green	>170	42	Mineral	L-XECFB 000	MP00/000K-45
Calcium sulfonate grease dedicated to high load bearing applications, NLGI grade 1-2	Ceran XM 220	1-2	Calcium sulfonate complex	Light Brown	>300	220	Mineral	L-XCFIB 1/2	KP1/2R-30
Aluminum Complex Grease, dedicated to Fifth Wheel application on Truck, NLGI grade 2.	Copal Truck FW	2	Aluminum complex	Black	>250	775	Mineral	L-XBDHB 2	KP2K-20

Urea solution



AdBlue®

AdBlue® is an effective solution used by Diesel vehicles equipped with SCR technology (Selective Catalytic Reduction). When combined with SCR technology, AdBlue® converts nitrogen oxide (NOx) emissions from Diesel engines into harmless nitrogen and water vapor. AdBlue® enables vehicles to meet new emission standards and comply with the EURO IV, V, VI norms.

Applications	International specifications	Composition
Solution composed of 67.5% deionized water and 32.5% high-purity urea	ISO 22241-1	Recommended in the process of exhaust gas depollution with SCR technology



ClearNOx®

ClearNOx® was developed and patented by TotalEnergies to solve problems of crystallization in the exhaust line upstream of the vehicle SCR system, resulting in high repair costs. These problems particularly affect vehicles running at low load or with frequent stop-and-go behavior, such as buses, trucks.

ClearNOx® is a preventive solution that keeps crystals from forming in the SCR system. Using it continuously keeps SCR systems working efficiently.

Applications	International specifications	Composition
Aqueous urea solution	ISO 22241-1 except paragraph 3.1	Recommended in the process of exhaust gas depollution with SCR technology. Recommended for vehicles subject to frequent stops, cold weather or running at low load. Prevents the formation of deposits (crystals) on the catalytic system SCR system, reducing the risk of clogging the system

LubAnac transport

A preventive maintenance tool and fleet management system:

- ☑ Lifetime extension of your equipment park
- ☑ Reducing Total Cost of Ownership (TCO)
- ☑ Optimising reliability and performance

What is the TotalEnergies Analysis Compared?

LubAnac Transport is a preventive maintenance tool and a fleet management system based on used oils analyses ensuring **a significant reduction of the TCO** of the customer by:

- preventing possible breakdowns,
- following regularly the condition of the lubricant and the wear of the mechanical components,
- reinforcing the lifetime and the reliability of the machines,
- optimizing the drain intervals safely.

Our professional clients are active in the automotive sector (road transport or non-road transport), industry and marine (internal and international markets). The LubAnac diagnostic service is provided worldwide by TotalEnergies subsidiaries to end users.

LubAnac Transport

How does LubAnac generate the diagnosis and propose remedial actions?

The diagnosis and related corrective measures are provided by the LubAnac Transport system, which is based on:

- **40 years of experience** and contribution to the LubAnac database, **over 8 million analyzes on 1 million monitoring organs**,
- **Customers feedback** on successful remedial actions,
- **A comparison between the measured values and the wear references** thanks to algorithms excluding variable parameters such as oil level or drain intervals.

Preventive maintenance tool for your vehicle fleet

A single analysis to cover all of your needs by ensuring optimal technical performance.



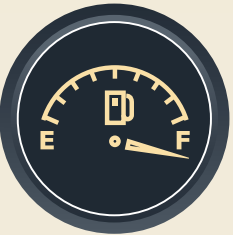
Reduces downtime of your fleet.
Prevention of possible mechanical breakdowns.



Increases the lifetime of your vehicle.
Decrease of the risk of excessive wear of the mechanical component.



Optimizes the maintenance.
Control of your maintenance budget.



Reduces the Total Cost of Ownership (TCO).
Optimization of the amortization of your vehicle park.

