

**LOTOS** engine oils



LOTOS Oil S.A. is a joint-stock company and a member of the Capital Group Grupa LOTOS S.A., which is a dynamically developing concern managed in accordance to modern standards. The Group's activities include oil extraction and processing, as well as the distribution and sales of a wide range of oil products.

The LOTOS Oil S.A. commercial activities comprise the production and distribution of lubricants: automotive and industrial oils and greases, base oils, and also automobile cosmetics and chemicals.

LOTOS Oil S.A. is a leader in the industry, with more than 30 % of shares in the domestic market.

The engine oils of the LOTOS brand are well–recognized to drivers not only in Poland, but also abroad. The high quality and reliability of these products make them attractive for the most demanding customers, and therefore LOTOS remains the most known brand on the Polish oil market.

The effective investment program and professional use of the possessed capital have resulted in achieving the highest quality of engine oils bearing the LOTOS trademark. The high-tech premium LOTOS Quazar engine oils, designed especially to protect the engines of the most modern vehicles, stem from a long-term cooperation of experts as well as testing. LOTOS Quazar oils have received many international certificates and have been approved to use by the automotive OEMs, including Volkswagen, MB, BMW, Ford and Porsche.

The effect of the work performed by the company's specialists is the other oil brand – TURDUS. This oil family is extensively developing, accordingly to the latest trends, and is addressed particularly to the users of special-purpose cars.

The advanced technology and the high quality of improvers, coming from the worldwide renowned suppliers, enabled to create the latest generation of industrial products.

LOTOS Oil offers not only the highest quality lubricants, but also extends the professional service of lubricating oils, which is an integral part of the sales offer. The Oil Service helps customers to introduce new procedures and technologies, providing safe operation of the machinery fleet.

LOTOS oils have been awarded with "Złoty Laur Konsumenta" (Golden Laurel of Customer) for the best Polish engine oil. LOTOS Mineralny (Mineral) has been honored with the promotion emblem "Teraz Polska" (Poland Now) in the 5-th edition of this contest, and LOTOS Traffic – in the 15-th edition. The TURDUS Powertec oil has been the winner of the "Produkt Roku" (Product of the Year) contest. The prize was awarded during the 19-th edition of the International Fair "Fuel Station". Furthermore, this oil has won an honorable mention of Europroduct in the 7-th edition of the contest organized by Polskie Towarzystwo Handlowe (The Polish Association of Trade).

Products offered by LOTOS meet the most demanding quality requirements, since they are based on cutting edge technologies and according to the quality assurance of the APC (Advanced Production Control) system. The entire manufacturing processes are compliant with the Quality Management System compatible with the international standard ISO 9001:2000.

Moreover, LOTOS Oil S.A. can take pride in having the certificate of quality management system consistent with the requirements of the AQAP 2110 system. It means that products of LOTOS Oil S.A. meet the requirements and criteria, which have been laid down by NATO for all NATO forces suppliers and companies operating in this industry.

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LOTOS ENGINE OILS WITH THERMAL CONTROL ECOMILIA

### LOTOS TRAFFIC PRO 025A/B SL/CF SAE 5W30

Specification: SAE 5W/30 • API SL/CF • ACEA A3/B4-08

Approvals: GM-LL-A-025, GM-LL-B-025

Meets the requirements of: VW 502.00, VW 505.00 • MB 229.5

High quality synthetic engine oil designed mostly for petrol and Diesel engines of Opel, Vauxhall, Saab and Chevrolet vehicles requiring the oil of GM-LL-A-025 or GM-LL-B-025 quality level. Excellent viscosity properties and high thermo-oxidative stability inhibit oil ageing. Provides fuel saving with maximum protection of an engine during the daily use.



#### **Properties:**

- optimal engine operating temperature, owing to Thermal Control formula
- proven protection for life time of engine
- extends the engine service life, protecting it against corrosion and formation of deposits and carbon build-up
- meets harmful exhaust components emission requirements, ensuring safe operation of catalytic exhaust converters
- easy starting at low temperatures
- extra cleaning performance

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	11,9	mm²/s
2.	Pour Point	- 42	°C
3.	Flash Point	235	°C
4.	Total Base Number	11,4	mgKOH/g
5.	Viscosity Index	170	

For the modern diesel engines, equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC DIESEL 505.01 oil, according to the vehicle manufacturer's recommendations.

**Packages:** 11, 41, 50kg, 180kg





### LOTOS Engine Oils with THERMAL CONTROL formula

### **LOTOS TRAFFIC PRO 505.01 SM/CF SAE 5W40**

Specification: SAE 5W/40 • API SM/CF • ACEA A3/B4-04 • ACEA C3-08

Approvals: VW 502.00/505.00/505.01 • RN 700, RN 710

Meets the requirements of: MB 229.31 • BMW Longlife-04

A synthetic engine oil of the latest generation. Contains a set of finely selected multi-functional improvers. Designed particularly for cars, equipped with Diesel engines and fuel injection units manufactured by Volkswagen, requiring the usage of oils meeting the requirements of VW 505.01 standard. Can be used in passenger cars of other manufacturers, equipped with both, Diesel and petrol engines, in which conventional synthetic oil was formerly used. Approved for cars with Diesel engines, equipped with catalytic systems and particulate filters, provided that the manufacturer recommends the application of ACEA C3 class oils.



#### **Properties:**

- o optimal engine operating temperature, owing to Thermal Control formula
- reduces wear and limits formation of deposits on the most loaded engine parts
- provides safe operation of catalytic exhaust converters
- resistant to the extreme thermal load, due to high quality of the base oil
- enables fast and easy engine starting in the extreme temperature conditions
- extra cleaning performance
- particularly recommended for urban driving

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	13,8	mm²/s
2.	Pour Point	- 40	°C
3.	Flash Point	233	°C
4.	Total Base Number	7,3	mgKOH/g
5.	Viscosity Index	170	

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of the Articles of the Civil Code. LOTOS Oil S.A assumes no liability for any consequences of using information contained in this catalogue, particularly while taking commercial and investment decisions. Data in tables are typical values obtained at standard tolerance of production lots; it is not a technical specification. The above-mentioned data, due to

continual product development, are subject to change. Actual product parameters are specified in the quality certificate delivered with every batch of product.

Packages: 11, 41, 50kg, 180kg





### LOTOS SYNTHETIC PLUS SN/CF SAE 5W/40

Specification: SAE 5W/40 • API SN/CF • ACEA A3/B4-08

Approvals: VW 502.00, VW 505.00 • BMW LL-01

Meets the requirements of: GM LL-B-025 • MB 229.5

The multi-grade, synthetic oil for diesel engine in passenger cars and delivery vans. It guarantee the maximum protection of an engine and the best operating conditions in the extreme urban environment. It is recommended for the engines with and without turbo-charging, where the use of the mid/low SAPS oils is not required.

LOTOS SYNTHETIC PLUS 5W40 is the market follower of LOTOS SYNTHETIC 5W40/LOTOS TRAFF 5W40 oils. It has been created as the result theirs reformulation, because of the new, elevated qualitative requirements according to ACEA 200 specification. It can be used as the substitute for the products



#### Własności:

- provides the optimal engine work temperature, owing to Thermal Control formula
- decreases engine wear, extending its life time 0
- prevents the formation of deposits and carbon build-up 0
- facilitates starting at low temperatures
- extra cleaning performance
- particularly recommended for urban driving

Item.	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	13,7	mm²/s
2.	Pour Point	-39	°C
3.	HTHS Viscosity	3.6	mPa*s
4.	Total Base Number	10	mgKOH/g
5.	Viscosity Index	165	

For the state-of-the-art diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC PRO 505.01 5W40 oil, provided that the manufacturer allows for using of an oil of a corresponding class in terms of viscosity and quality.

**Packages:** 11, 41, 50kg, 180kg





### LOTOS Engine Oils with THERMAL CONTROL formula

### LOTOS SYNTHETIC TURBODIESEL PLUS CF SAE 5W/40

Specification: SAE 5W/40 • API CF • ACEA A3/B3-08 • ACEA A3/B4-08

Approvals: VW 502.00, VW 505.00 • BMW LL-01

Meets the requirements of: MB 229.5

The multi-grade, synthetic oil for diesel engine in passenger cars and delivery vans. It guarantee the maximum protection of an engine and the best operating conditions in the extreme urbal environment. It is recommended for the engines with and without turbo-charging, where the use of the mid/low SAPS oils is not required.

LOTOS SYNTHETIC TURBODIESEL PLUS 5W40 is the market follower of LOTOS TRAFFIC TURBODIESEL of It has been created as the result of its reformulation because of the new, elevated qualitative requiremen according to ACEA 2008 specification. It can be used as the substitute for this product.



#### Własności:

- o provides the optimal engine work temperature, owing to Thermal Control formula
- decreases engine wear, extending its life time
- prevents the formation of deposits and carbon build-up
- facilitates starting at low temperatures
- extra cleaning performance
- particularly recommended for urban driving

Item.	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	13,6	mm²/s
2.	Pour Point	-39	°C
3.	HTHS Viscosity	3.6	mPa*s
4.	Total Base Number	10	mgKOH/g
5.	Viscosity Index	168	

For the state-of-the-art diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC PRO 505.01 5W40 oil, provided that the manufacturer allows for using of an oil of a corresponding class in terms of viscosity and quality.

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Packages: 11, 41, 50kg, 180kg





### **LOTOS SEMISYNTETIC SL/CF SAE 10W40**

Specification: SAE 10W/40 • API SL/CF • ACEA A3-02/B4-02 • ACEA A3/B3-04

Meets the requirements of: VW 505.00 • MB 229.1

High-quality mineral oil, based upon the modern technologies. Features excellent antioxidant, anticorrosive, cleaning-dispersion and viscosity-temperature properties. Guarantees proper lubrication and efficient engine protection. Designed for petrol and diesel engines of passenger cars and delivery vans.



#### **Properties:**

- optimal engine operating temperature, owing to Thermal Control formula
- reduces wear of engine parts
- prevents from formation of deposits and carbon build-up
- meets the requirements on harmful exhaust components emission, providing safe operation of catalytic exhaust converters
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,5	mm²/s
2.	Pour Point	- 39	°C
3.	Flash Point	233	°C
4.	Total Base Number	7,85	mgKOH/g
5.	Viscosity Index	153	

For the modern diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC DIESEL 505.01 oil, according to the vehicle manufacturer's recommendations.

**Packages:** 11, 41, 50kg, 180kg





### LOTOS Engine Oils with THERMAL CONTROL formula

# **LOTOS DIESEL SEMISYNTHETIC CF SAE 10W40**

Specification: SAE 10W/40 • API CF • ACEA B3-98/B4-02 • ACEA A3/B3-04

Meets the requirements of: VW 505.00 • MB 229.1

High quality, semi-synthetic engine oil based upon the latest technology. Features excellent antioxidant, anticorrosive, cleaning-dispersion and viscosity-temperature properties. Guarantees proper lubrication and efficient engine protection. Designed for use in diesel engines of passenger cars and delivery vans, with or without turbo-charging.



LOTOS Engine Oils with THERMAL CONTROL formula

#### **Properties:**

- optimal engine operating temperature, owing to Thermal Control formula
- reduces wear of engine parts
- extra cleaning performance to help prevent from formation of deposits and carbon build-up
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,8	mm²/s
2.	Pour Point	- 39	°C
3.	Flash Point	228	°C
4.	Total Base Number	7,9	mgKOH/g
5.	Viscosity Index	155	

For the modern diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC DIESEL 505.01 oil, according to vehicle manufacturer's recommendations.

Packages: 11, 41, 50kg, 180kg





# **LOTOS SEMISYNTHETIC LPG SL SAE 10W40**

Specification: SAE 10W/40 • API SL • ACEA A3/B3-04 • ACEA A3-02

Approvals: MB 229.1

High quality multi-season semisynthetic engine oil. It provides an excellent protection to four-stroke engines of passenger and light trucks fueled with LPG-gasoline system, in any operating conditions. Recommended, if the manufacturer allows for using of an oil of API SL or lower quality class.



### **Properties:**

- Thermal Control formula provides the optimum temperature for the engine operation
- reduces wear of double fueled (LPG-petrol) engine parts
- guarantees extra cleaning performance
- facilitates starting at low temperatures
- recommended for standard oil drain intervals

Item.	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,3	mm²/s
2.	Pour Point	-39	°C
3.	Flash Point	225	°C
4.	Total Base Number	7.7	mgKOH/g
5.	Viscosity Index	150	

Packages: 11, 41





### LOTOS Engine Oils with THERMAL CONTROL formula

# **LOTOS MINERALNY SL/CF SAE 15W40**

Specification: SAE 15W/40 • API SL/CF • ACEA A3-02/B3-98 • ACEA A3/B3-04

Meets the requirements of: VW 505.00 • MB 229.1

High-quality mineral oil, based upon the modern technologies. Features excellent antioxidant, anticorrosive, cleaning-dispersion and viscosity-temperature properties. Guarantees proper lubrication and efficient engine protection. Designed for petrol and diesel engines of passenger cars and delivery vans.



#### **Properties:**

- owing to Thermal Control formula, it guarantees optimal engine work temperature
- high resistance to ageing and oxidation
- prevents from formation of deposits and carbon build-up, reducing the engine wear
- meets the requirements on harmful exhaust components emission, providing safe operation of catalytic exhaust converters
- recommended for standard oil drain intervals
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,5	mm²/s
2.	Pour Point	- 36	°C
3.	Flash Point	238	°C
4.	Total Base Number	7,2	mgKOH/g
5.	Viscosity Index	135	

For the modern diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC DIESEL 505.01 oil, according to the vehicle manufacturer's recommendations.

Packages: 11, 41, 50kg, 180kg





# **LOTOS MINERALNY LPG SL SAE 15W40**

Specification: SAE 15W/40 • API SL • ACEA A3/B3-04 • ACEA A3-02

Approvals: MB 229.1

High quality multi-season mineral engine oil. Provides an ultimate protection to double fueled (LPG-gasoline) engines in any operating conditions. Recommended, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



### **Properties:**

- Thermal Control formula provides the optimum temperature for the engine operation
- reduces wear of double fueled (LPG-gasoline) engine parts
- guarantees extra cleaning performance
- facilitates starting at low temperatures
- recommended for standard oil drain intervals

Item.	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,7	mm²/s
2.	Pour Point	-33	°C
3.	Flash Point	225	°C
4.	Total base Number	7.0	mgKOH/g
5.	Viscosity Index	132	

Packages: 1l, 4l





### LOTOS Engine Oils with THERMAL CONTROL formula

# **LOTOS DIESEL CG-4/SJ SAE 15W40**

Specification: SAE 15W/40 • API CG-4/SJ • ACEA E2-96/B2-98/A2-96

Approvals: MB - Approval 228.1 • VOLVO VDS • MAN 271

High quality engine oil of HDPO (High Performance Diesel Oil) class. Contains finely selected set of additives, acting as antioxidants, corrosion inhibitors, and improving cleaning-dispersion, lubrication and viscosity-temperature properties. Designed for diesel engines of passenger cars, delivery vans, trucks and buses, where an oil of this quality and viscosity class is recommended.



#### **Properties:**

- prevents from formation of deposits and carbon build-up, provides an engine cleanliness and reduces its wear
- meets the requirements on harmful exhaust components emission, providing safe operation of catalytic exhaust converters
- recommended for standard oil drain intervals
- o facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,1	mm²/s
2.	Pour Point	- 30	°C
3.	Flash Point	234	°C
4.	Total Base Number	8,8	mgKOH/g
5.	Viscosity Index	134	

For the modern diesel engines equipped with emission control systems (particulate filters) it is recommended to use LOTOS TRAFFIC DIESEL 505.01 oil, according to the vehicle manufacturer's recommendations.

Packages:

1l, 4l, 26kg, 50kg, 180kg, 860kg





continual product development, are subject to change. Actual product parameters are specified in the quality certificate delivered with every batch of product.

### **LOTOS CITY Engine Oils**

# **LOTOS CITY SF/CD SAE 15W40**

Specification: SAE 15W/40 • API SF/CD

Multi-grade mineral oil, designed for heavy working cars, operating in severe conditions, particularly in the environment of urban driving. Can be used in the engines equipped with a catalyst, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



#### **Properties:**

- reduces wear of engine parts
- ensures perfect engine cleanliness
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	13,8	mm²/s
2.	Pour Point	- 30	°C
3.	Flash Point	240	°C
4.	Total Base Number	9,4	mgKOH/g
5.	Viscosity Index	131	

Packages: 11, 51, 50kg, 180kg





### **LOTOS CITY Engine Oils**

# **LOTOS CITY GAS SJ SAE 15W40**

Specification: SAE 15W/40 • API SJ • ACEA A3-02 • ACEA A3/B3-04

Meets the requirements of: MB 229.1 • VW 505.00

Multi-grade, mineral engine oil, designed particularly for double fueled (LPG-petrol) engines. Effectively protects an engine against high temperatures resulting from so-called dry combustion, typical for use of the gaseous fuels. Recommended, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



LOTOS CITY Engine Oils

#### **Properties:**

- reduces wear of double fueled (LPG-petrol) engine parts
- extra cleaning performance
- facilitates starting at low temperatures
- recommended for cars produced before 2000

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,6	mm²/s
2.	Pour Point	- 33	°C
3.	Flash Point	236	°C
4.	Total Base Number	7,1	mgKOH/g
5.	Viscosity Index	132	

Packages: 11, 51, 50kg, 180kg





Specification: SAE 20W/50 • API SF/CD

# **LOTOS CITY DIESEL CC SAE 20W50**

Specification: SAE 20W/50 • API CC

**LOTOS CITY Engine Oils** 

Multi-grade mineral oil, designed for four-stroke, sparkignition an diesel engines. Designed for heavy working cars, operating in severe conditions, with particularly in

LOTOS CITY STANDARD SF/CD SAE 20W50

the environment of urban driving. Can be used in the engines equipped with a catalyst, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



#### **Properties:**

- reduces wear of engine parts
- ensures perfect engine cleanliness

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	18	mm²/s
2.	Pour Point	- 27	°C
3.	Flash Point	245	°C
4.	Total Base Number	5,8	mgKOH/g
5.	Viscosity Index	122	

**Packages:** 





Multi-grade mineral oil, designed for lubrication of older generation, diesel engines without turbo-charging. Designed for heavy working cars, operating in severe conditions. Due to the high viscosity, it perfectly seals the clearances in the exploited engines. Can be used in engines powered with petrol with high sulfur content, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



LOTOS CITY Engine Oils

#### **Properties:**

• basic protection level for diesel engines of an older design

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	17,8	mm²/s
2.	Pour Point	- 27	°C
3.	Flash Point	252	°C
4.	Total Base Number	8,8	mgKOH/g
5.	Viscosity Index	123	

Packages: 1l, 5l, 26kg, 50kg, 180kg





continual product development, are subject to change. Actual product parameters are specified in the quality certificate delivered with every batch of product.

# **LOTOS DIESEL CG-4/SJ SAE 15W40**

Specification: SAE 15W/40 • API CG-4/SJ

**LOTOS DIESEL Engine Oils** 

Approvals: MB – Approval 228.1 • VOLVO VDS • MAN 271

# **LOTOS DIESEL FLEET**

Specification: SAE 5W/40 • SAE 10W/40 • API CI-4/CH-4/CF/SL • ACEA E7/E5/E3/B3/B4/A3 • **DHD 1 GLOBAL** 

Corresponds to quality level: MB 228.3; 229.1 • VOLVO VDS-3 • MAN 3275 •

Cummins CES 20071/72/76/77/78 • Caterpilar ECF-1 • Renault Trucks RLD-2 • MTU-Typ2 • SCANIA LDF

The Lotos Diesel Fleet oils are formulated upon synthetic hydrocarbons and molecularly changed and selectively refined, solvent dewaxed and hydrorefined oil distillates received from crude oil. They contain a properly selected package of anti-oxidation and anticorrosion additives as well as the additives improving washing and dispersing, lubrication, viscosity and temperature characteristics. The oil is designed for the lubrication of high-speed four-stroke diesel engines in truck-tractors, trucks, delivery vans and special vehicles. The lowered ash content let them also be used in city buses. The oil is particularly recommended for engines with combustion gas recirculation system, where there are adopted modern solutions lowering emission of harmful substances to the atmosphere.

### **Properties:**

- provide excellent lubrication in all operating conditions
- restrict to the possible minimum emission of particulates from an engine
- have increased resistance to black sludge formation
- provide perfect cleanness of the co-operating elements
- guarantee extended oil change periods in engines of newer construction
- meet the requirements relating to emission of harmful exhaust gases contents, providing safe performance of catalytic exhaust gases burners that satisfy Euro IV requirements in this range

Item	Parameter	Va	lue	Unit
		10W40	5W40	
1.	Kinematic Viscosity at 100°C	14,2	14,1	mm²/s
2.	Pour Point	- 36	- 45	°C
3.	Flash Point	220	220	°C
4.	Total Base Number	10,8	10,8	mgKOH/g
5.	Viscosity Index	150	160	

The oils cannot be used in combustion gases filtration systems fitted with a diesel particulate filter.

**Packages:** in bulk, 180kg

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High quality engine oil of HDPO (High Performance Diesel Oil) class. Designed for diesel engines of passenger cars, delivery vans, trucks and buses. Recommended, if the manufacturer allows for using of an oil of a corresponding or lower quality class.



LOTOS CITY Engine Oils

#### **Properties:**

- reduces wear of engine parts
- prevents from formation of deposits and carbon build-up, keeping the engine clean and reduc-
- meets the requirements on harmful exhaust components emission, providing safe operation of catalytic exhaust converters
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,1	mm²/s
2.	Pour Point	-30	°C
3.	Flash Point	234	°C
4.	Total Base Number	8,8	mgKOH/g
5.	Viscosity Index	134	

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Packages: 1l, 5l, 26kg, 50kg, 180kg





# **LOTOS DIESEL CLASSIC**

Specification: SAE10W/30, 10W/40, 15W/40, 10W, 30 • API CF-4

Engine oil designed for use in trucks, delivery vans and buses fitted with compression-ignition engines. Recommended for use in vehicles where oils of lower API CF-4, CE, CD classes are applied.

#### **Properties:**

- guarantees perfect efficiency and reliability
- keeps the engine clean and reduces it wear by retarding deposits and carbon deposits formation
- ensures easy start-ups at low temperatures
- reduces refills
- meets the requirements concerning the emission of harmful contents of exhaust gases, providing safe performance of catalytic exhaust gases burners

Item	Parameter	Value				Unit	
		10W/30	10W/40	15W/40	10W	30	
1.	Kinematic Viscosity at 100°C	11,3	14,2	15,1	6,9	11,6	mm²/s
2.	Pour Point	- 30	- 33	- 30	- 30	-18	°C
3.	Flash Point	246	230	236	236	236	°C
4.	Total Base Number	11,53	6,56	11,40	6,32	12,00	mg KOH/g
5.	Viscosity Index	144	152	135	110	99	

Packages: in bulk, 180kg

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### **LOTOS DIESEL Engine Oils**

# **LOTOS DIESEL CLASSIC PLUS SAE 10W40**

Specification: SAE 10W/40 • API CH-4

High quality, multigrade engine oil formulated on the base of selectively refined, solvent dewaxed and hydrorefined oil distillates received from crude oil. Appropriate for use in compression-ignition engines of cars, delivery vans, trucks and busses.

#### **Properties:**

- o guarantees perfect efficiency and reliability
- keeps the engine clean and reduces it wear by retarding deposits and carbon deposits formation
- ensures easy start-ups at low temperatures
- reduces refills
- meets the requirements concerning the emission of harmful contents of exhaust gases, providing safe performance of catalytic exhaust gases burners

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	14,2	mm²/s
2.	Pour Point	- 39	°C
3.	Flash Point	220	°C
4.	Total Base Number	11,43	mgKOH/g
5.	Viscosity Index	153	

Packages: 26kg, 180kg

LOTOS CITY Engine Oils

LOTOS CITY Engine Oils

### **LOTOS DIESEL Engine Oils**

# **LOTOS DIESEL CLASSIC SAE 40**

Specification: SAE 40 • API CF-4/CF-2

Engine oil formulated on the base of selectively refined, solvent dewaxed and hydrorefined oil distillates received from crude oil. It contains a properly selected package of anti-oxidation and anticorrosion additives, improving the washing and dispersant qualities as well as lubrication, viscosity and temperature attributes.

It is designed for use in HD vehicles, delivery vans and buses fitted with compression-ignition engines or in engines of other aggregates or machines, where meeting the API CF-4/CF-2 requirements is vital. The oil is recommended for cars, where oils of lower API CF-4, CE, CD classes are applied.

#### **Properties:**

- guarantees superior engine cleanliness and protection against corrosion
- by retarding deposits and carbon deposits formation it reduces engine wear
- ensures easy start-ups at low temperatures
- reduces the performance failure that might be caused by the sulphated ash content in the oil
- reduces refills
- meets the requirements relating to emission of harmful exhaust gases contents, providing safe performance of catalytic exhaust gases burners

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	17,5	mm²/s
2.	Pour Point	- 18	°C
3.	Flash Point	236	°C
4.	Total Base Number	8,00	mg KOH/g
5.	Viscosity Index	99	
6.	Sulfated Ash	0,8	% m/m

Packages: 180kg

### Other oils

# **LOTOS MINERALNY SJ/CF SAE 15W40**

Specification: SAE 15W/40 • API SJ/CF • ACEA A3-02/B3-98

Meets the requirements of: VW 505.00 • MB 229.1

High quality mineral engine oil. Guarantees proper lubrication and effective protection of an engine. Designed for older generation, petrol and diesel engines of passenger cars and delivery vansif the manufacturer allows for of an oil of a corresponding or lower quality class.



#### **Properties:**

- prevents from formation of deposits and carbon build-up, reducing an engine wear
- meets the requirements on harmful exhaust components emission, providing safe operation of catalytic exhaust converters
- recommended for standard oil drain intervals
- facilitates starting at low temperatures

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	15	mm²/s
2.	Pour Point	-30	°C
3.	Flash Point	230	°C
4.	Total Base Number	6,9	mgKOH/g
5.	Viscosity Index	130	

Packages: 11, 51





# LOTOS 2T

**Specification**: API TC

High quality, semi-synthetic, low-fuming oil, designed mainly for use in one-track vehicles, powered with two-stroke engines. Formulated from deeply-refined mineral oil with synthetic oil, solvent of kerosene origin, enriched with a finely selected set of improvers. Features low propensity to fuming of exhaust gases and forming of deposits on the engine elements.

The recommended concentration of dosing oil on mixing with gasoline is 2-4%, or other, according to the manufacturer's requirements. The product is self-mixing with gasoline. Red colored for dosing purposes and quality control of the prepared mix.



### **Properties:**

- ensures low fuming of exhaust gases
- suitable to use in a wide range of operating conditions
- reduces wear of engine parts
- prevents from deposits and carbon build-up

Item	Parameter	Value	Unit
1.	Kinematic Viscosity at 100°C	9,9	mm²/s
2.	Pour Point	-30	°C
3.	Flash Point	100	°C
4.	Sulfated Ash	0,1	%

#### **Packages:**

11



Notes

The product offer of LOTOS Oil S.A. is available in the following catalogues:

LOTOS ENGINE OILS

TURDUS ENGINE OILS AND OTHER LUBRICANTS FOR TRUCKS AND BUSES

PRODUCTS FOR AGRICULTURE, FORESTRY, HOUSEHOLDS AND HORTICULTURE

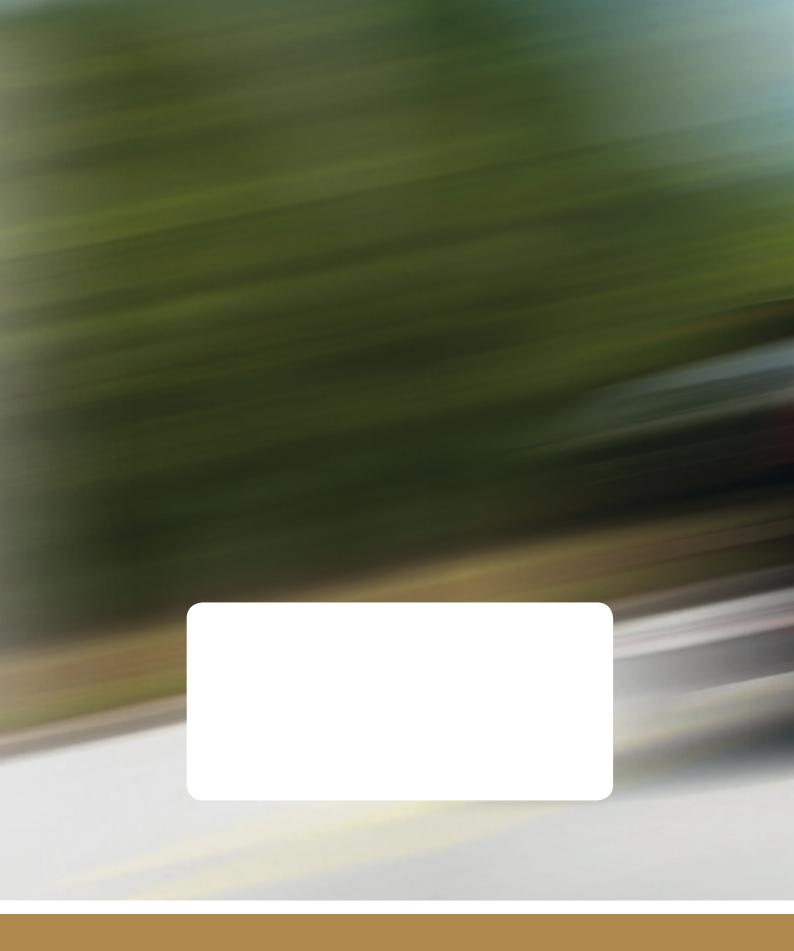
LUBRICANTS FOR VARIOUS APPLICATIONS

PRODUCTS FOR INDUSTRY

PRODUCTS FOR MARINE AND RAILWAY INDUSTRIES AND OTHER PRODUCTS OF SPECIAL APPLICATION

Second edition





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