

**TITAN**

**High-tech protection for engines**



Contact:



**Engine oils for passenger cars  
1/2010**

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## ***The right high-tech engine oil for every engine!***

TITAN engine oils are the result of the latest research and development by the world's largest independent lubricant specialist. Developed together with leading automobile manufacturers, tailored to satisfy the demands of today's high-tech engines: offering outstanding high-performance, fuel-economy and wear protection.

TITAN engine oils: Premium quality from the German automobile industry's leading lubricant OEM. Made in Germany.



# **NEW**

The **TITAN** GT1 PRO GAS range:

*A new series of specific engine oils to suit gas powered engines. These oils guarantee a reliable and long-lasting operation of the engine.*

Available as  
TITAN GT1 PRO GAS SAE 5W-30/SAE 5W-40  
and TITAN SYN PRO GAS SAE 10W-40.

Our new brochure "Engine oils for gasoline engines with LPG- and CNG-operation" you will find under  
[www.fuchs-europe.de/titanprogas.html](http://www.fuchs-europe.de/titanprogas.html)

While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. Subject to amendment. Edition 01/2010

**TITAN**  
**GT1 PRO C-1**  
**SAE 5W-30**

Premium motor oil specially developed for Mazda vehicles with exhaust after treatment and turbocharger.



- + optimum formulation for today's cars and vans with or without extended service intervals
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + radically reduced contaminant emissions – a plus for the environment
- + significantly reduced fuel and oil consumption



**Specifications/approvals\*:**  
ACEA C1  
ACEA A5/B5

**FUCHS recommendations:**  
JASO DL-1  
MAZDA

**TITAN**  
**GT1 PRO C-2**  
**SAE 5W-30**

Premium motor oil specially developed for PSA vehicles with exhaust after treatment and turbocharger.



- + optimum formulation for today's cars and vans with or without extended service intervals
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + radically reduced contaminant emissions – a plus for the environment
- + significantly reduced fuel and oil consumption



**Specifications/approvals\*:**  
ACEA C2  
ACEA A1/B1/A5/B5  
API SM/CF

**FUCHS recommendations:**  
CITROËN  
FIAT 9.55535-S1  
PEUGEOT

**TITAN**  
**GT1 PRO C-3**  
**SAE 5W-30**

Premium motor oil specially developed for VW, BMW and Mercedes-Benz vehicles with exhaust after treatment and turbocharger.



- + optimum formulation for today's cars and vans with or without extended service intervals
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + radically reduced contaminant emissions – a plus for the environment
- + significantly reduced fuel and oil consumption
- + a rationalisation grade for non-licensed repair shops



**Specifications/approvals\*:**  
ACEA C3  
ACEA A3/B4  
BMW LONGLIFE-04  
MB-APPROVAL 229.51  
VW 504 00/507 00

**FUCHS recommendations:**  
FORD M2C917-A

**TITAN**  
**GT1 PRO C-4**  
**SAE 5W-30**

Premium motor oil specially developed for Renault vehicles with exhaust after treatment and turbocharger.



- + optimum formulation for today's cars and vans with or without extended service intervals
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + radically reduced contaminant emissions – a plus for the environment



**Specifications/approvals\*:**  
ACEA C4  
RENAULT RN0720

**FUCHS recommendations:**  
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**TITAN**  
**GT1 PRO FLEX**  
**SAE 5W-30**

Premium motor oil specially developed for BMW, Mercedes-Benz and Opel vehicles with exhaust after treatment and turbocharger.

PROTECTS YOUR  
DIESEL PARTICLE FILTER

- + optimum formulation for today's cars and vans with or without extended service intervals
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + radically reduced contaminant emissions – a plus for the environment
- + significantly reduced fuel and oil consumption
- + a rationalisation grade for non-licensed repair shops



**Specifications/approvals\*:**

ACEA C3  
ACEA A3/B4  
API SM  
BMW LONGLIFE-04  
MB-APPROVAL 229.51  
GM DEXOS 2  
VW 502 00/505 00/505 01

**FUCHS recommendations:**  
FORD M2C917-A

**TITAN**  
**GT1 LONGLIFE III**  
**SAE 5W-30**

Premium motor oil specially developed for VW vehicles with exhaust after treatment and turbocharger.

PROTECTS YOUR  
DIESEL PARTICLE FILTER

- + specially developed to meet the needs of today's engines and their exhaust treatment systems (particle filters, catalytic converters)
- + outstanding lubrication at all temperatures – a plus for performance and engine lifetime
- + optimum formulation for VW cars with or without extended service intervals



**Specifications/approvals\*:**

ACEA C3  
ACEA A3/B4  
VW 504 00/507 00

**FUCHS recommendations:**  
FORD M2C917-A

**TITAN**  
**GT1**  
**SAE 5W-40**

Premium motor oil specially developed for vehicles with exhaust after treatment and first-generation diesel particle filters.

PROTECTS YOUR  
DIESEL PARTICLE FILTER

- + optimum formulation for diesel cars fitted with particle filter systems
- + reduced start-up wear due to fast oil circulation, even at low temperatures
- + outstanding lubrication at all temperatures – a plus for performance and engine lifetime



**Specifications/approvals\*:**

ACEA C3  
ACEA A3/B4  
API SM/CF  
BMW LONGLIFE-04  
FORD M2C917-A  
MB-APPROVAL 229.31  
PORSCHE A 40  
RENAULT RN0700/0710  
VW 502 00/505 00/505 01

**FUCHS recommendations:**  
FIAT 9.55535-S2

**TITAN**  
**Supersyn**  
**LONGLIFE PLUS**  
**SAE 0W-30**

Ultra-high-performance motor oil formulated with fully-synthetic base oils. Specially developed for VW Longlife Technology.

- + high-tech motor oil especially for VW cars with Longlife Technology
- + suitable for gasoline and diesel car engines with or without unit injector technology
- + highly stable lubricating film and thus outstanding lubrication at high temperatures such as in stop-and-go traffic in hot summers
- + excellent fuel economy and significantly reduced cold-start wear



**Specifications/approvals\*:**

ACEA A5/B5  
VW 503 00/506 00/506 01

**FUCHS recommendations:**  
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\*Between the consecutive editions of this brochure our specifications and approvals might be upgraded. You will find the current specifications/approvals in our product information.

**TITAN**  
**Supersyn**  
**LONGLIFE**  
**SAE 5W-40**

*Ultra high-performance, fuel-economy oil for a variety of vehicles with or without extended service intervals.*

- + optimum cold starting and lower oil consumption.
- + significantly reduced fuel consumption, lower oil consumption and reduced contaminant emissions

**TITAN**  
**Supersyn**  
**SAE 0W-30**

*Ultra-high-performance motor oil formulated with fully-synthetic base oils for VW vehicles. Releases performance reserves in every engine.*

- + super-fast oil circulation. Reduces start-up wear
- + highly stable lubricating film and thus outstanding lubrication at high temperatures such as in stop-and-go traffic in hot summers
- + excellent fuel-economy
- + releases performance reserves in every engine

**TITAN**  
**Supersyn**  
**SAE 5W-30**

*Ultra-high-performance motor oil. Specially developed for all high-tech engines.*

- + fast oil circulation even at low temperatures for reduced start-up wear
- + outstanding lubrication at all temperatures – a plus for performance and engine lifetime
- + excellent fuel-economy
- + releases performance reserves in every engine

**TITAN**  
**Supersyn F**  
**SAE 5W-30**

*Ultra-high-performance motor oil. Specially developed for all Ford engines.*

- + fast oil circulation even at low temperatures for reduced start-up wear
- + outstanding lubrication even at high temperatures – a plus for performance and engine lifetime
- + significantly reduced fuel consumption
- + minimal oil consumption



**Specifications/approvals\*:**

ACEA A3/B4  
 API SM/CF  
 BMW LONGLIFE-01  
 MB-APPROVAL 229.5  
 PORSCHE A 40  
 VW 502 00/505 00

**FUCHS recommendations:**

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**Specifications/approvals\*:**

ACEA A3/B4  
 API SL/CF  
 MB-APPROVAL 229.3  
 VW 502 00/503 01/505 00

**FUCHS recommendations:**

BMW LONGLIFE-98

**Specifications/approvals\*:**

ACEA A3/B4  
 API SM/CF  
 MB-APPROVAL 229.3  
 VW 502 00/505 00

**FUCHS recommendations:**

BMW LONGLIFE-98

**Specifications/approvals\*:**

ACEA A5/B5  
 FORD M2C913-C

**FUCHS recommendations:**

ACEA A1/B1  
 FORD M2C913-A  
 FORD M2C913-B  
 JAGUAR M2C913-B

**TITAN**  
**Supersyn PLUS**  
**SAE 5W-40**

*Ultra-high-performance motor oil. The specialists' oil for high-tech diesel engines.*

- + tailor-made, fuel economy oil for diesel engines
- + perfect for advanced diesel engines with Common-Rail or Unit Injector technology
- + a Super PLUS for engine life

**TITAN**  
**Supersyn**  
**SAE 5W-40**

*Ultra-high-performance motor oil for numerous car engines.*

- + fast oil circulation even at low temperatures for reduced start-up wear
- + outstanding lubrication at all temperatures – a plus for performance and engine lifetime
- + fuel-economy

**TITAN**  
**SYN MC**  
**SAE 10W-40**

*Super-high-performance motor oil based on MC-synthesis base oils for a variety of gasoline and diesel engines.*

- + greater performance plus high lubrication reserves compared to conventional mineral oil-based engine oils. Fuel-economy quality at a favourable price
- + lower oil consumption and reduced diesel particle emissions



**Specifications/approvals\*:**  
 ACEA A3/B4  
 API SL/CF  
 FORD M2C917-A  
 MB-APPROVAL 229.1  
 VW 502 00/505 00/505 01

**FUCHS recommendations:**  
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**Specifications/approvals\*:**  
 ACEA A3/B4  
 API SM/CF  
 BMW LONGLIFE-98  
 MB-APPROVAL 229.3  
 PORSCHE A 40  
 VW 502 00/505 00

**FUCHS recommendations:**  
 FIAT 9.55535-H2/M2/N2/Z2

**Specifications/approvals\*:**  
 ACEA A3/B4  
 API SL/CF  
 MB-APPROVAL 229.1

**FUCHS recommendations:**  
 BMW SPECIAL  
 FIAT 9.55535-D2/G2  
 VW 500 00/505 00

## How to find the right motor oil.

# TITAN

There are all sorts of motor oils available which fulfil all manner of specifications. This should explain what the most important motor oil specifications mean.

**ACEA** The European ACEA classification system categorises the various applications of motor oils with letters:

- A** for gasoline car engines
- B** for small-capacity diesel engines in cars, vans and transporters
- C** for cars fitted with particle filters

**API:** The API grades (API = American Petroleum Institute) classify motor oils according to the American demands and quality criteria they fulfil. The current API classification for gasoline motor oils is SM. Passenger car diesel engines are currently not classified by the API.

**SAE:** The viscosity of an motor oil is described by its SAE Grade (SAE = Society of Automotive Engineers). In the case of an SAE 0W-30 motor oil, the first number describes how thin the oil is at low temperatures. The smaller this number, the better the oil flows at low temperatures and the faster the oil reaches important bearings in the engine. The second figure describes the flowability of the oil at high temperatures.



### Gasoline Engines

- A1** Category for Fuel-economy motor oils with particularly low High Temperature High Shear viscosity (HTHS < 3.5 mPas). Recommended viscosity grades are XW-30 and XW-20.
- A2** Category for conventional and low-viscosity motor oils.
- A3** Category for conventional and low-viscosity motor oils with greater demands than A2. Out-performs A2 with regard to Noack (evaporation losses), piston cleanliness and oxidation stability.
- A5** Category for conventional and low-viscosity motor oils. Fulfils ACEA A3 but with lower HTHS viscosity. A  $\geq 2.5$  % reduction in fuel consumption must be achieved in a test engine compared to a 15W-40 reference oil.

### Diesel Car Engines

- B1** Category for Fuel-Economy motor oils with particularly low High Temperature High Shear viscosity (corresponds to A1).
- B2** Category for conventional and low-viscosity motor oils.
- B3** Category for conventional and low-viscosity motor oils. Out-performs ACEA B2 with regard to cam wear, piston cleanliness and viscosity stability in high soot conditions.
- B4** New category for direct-injection TDI diesel engines.
- B5** Similar to ACEA B4 but with lower HTHS viscosity. A  $\geq 2.5$  % reduction in fuel consumption must be achieved in a test engine compared to a 15W-40 reference oil.
- C1** For car diesel engines fitted with particle filters. Max. sulphate ash content: 0.5 %. With lower HTHS (FORD).
- C2** For car diesel engines fitted with particle filters. Max. sulphate ash content: 0.8 %. With HTHS > 2.9 mPas (Peugeot).
- C3** For car diesel engines fitted with particle filters. Max. sulphate ash content: 0.8 %. With HTHS > 3.5 mPas (Mercedes-Benz, BMW).
- C4** Introduced in 02/2007. For car diesel engines fitted with particle filters. Max. sulphate ash content: 0.5 %. With HTHS  $\geq 3.5$  mPas (Renault).

## Approvals by manufacturer's.

# TITAN

Apart from the specifications listed below, a number of manufacturers still demand tests on their own engines.

### **BMW specification**

### **Application area**



<b>BMW SPECIAL</b>	Oils for gasoline engines up to 1998 or diesel engines.
<b>BMW LONGLIFE-98</b>	Oils for special gasoline engines from 1998 on.
<b>BMW LONGLIFE-01</b>	Oils for special gasoline engines from 09/2001 on.
<b>BMW LONGLIFE-01 FE</b>	Oils for certain gasoline engines from 2001 on.
<b>BMW LONGLIFE-04</b>	Oils for certain engines from 2004 on.

### **Ford specification**

### **Application area**



<b>M2C912-A1</b>	Oils for gasoline and diesel car engines except 1.9 TDI (Ford Galaxy) and 1.4 TDCI (Ford Fiesta).
<b>M2C913-A</b>	Oils for gasoline and diesel car engines except 1.9 TDI (Ford Galaxy) and 1.4 TDCI (Ford Fiesta).
<b>M2C913-B</b>	Oils for 1.4 TDCI engines (Ford Fiesta).
<b>M2C913-C</b>	Oils for all vehicles requiring 913-B or A. Fuel-efficient.
<b>M2C917-A</b>	Oils for 1.9 TDI diesel engines (Ford Galaxy).

### **Mercedes-Benz specification**

### **Application area**



<b>MB-APPROVAL 229.1</b>	Oils for gasoline and diesel car engines. More stringent than ACEA A2-96/A3-96 and B2-96/B3-96.
<b>MB-APPROVAL 229.3</b>	Same as 229.1 but with extended oil change intervals (15,000 – 20,000 km).
<b>MB-APPROVAL 229.31</b>	Motor oils for cars fitted with diesel particle filters.
<b>MB-APPROVAL 229.5</b>	Motor oils for cars with extended oil change intervals (20,000 km) and lower emissions.
<b>MB-APPROVAL 229.51</b>	Motor oils for cars fitted with diesel particle filters and extended oil change intervals (20,000 km).

### **Opel specification**

### **Application area**



<b>GM-LL-A-025</b>	Oils for gasoline car engines, Fuel Economy.
<b>GM-LL-B-025</b>	Oils for diesel car engines, Fuel Economy.
<b>GM DEXOS 2</b>	Prospective GM specification for the aftermarket for gasoline and diesel engines

### **Renault specification**

### **Application area**



<b>RN0700</b>	Oils for all gasoline engines.
<b>RN0710</b>	Oils for all diesel engines without FAP filters.
<b>RN0720</b>	Oils for all diesel engines with FAP filters

### **VW specification**

### **Application area**



<b>VW 500 00</b>	Low-viscosity oils for gasoline and normally-aspirated diesel engines. Only SAE 0W-XX, 5W-XX and 10W-XX oils. XX > 40 oils were not included after 10/1991.
<b>VW 501 01</b>	Conventional multigrade motor oils without low-viscosity characteristics for gasoline and normally-aspirated diesel engines.
<b>VW 502 00</b>	Low viscosity oils for gasoline engines and difficult operating conditions.
<b>VW 503 00</b>	Specification for gasoline car engines with extended service intervals (30,000 km or 2 years). Surpasses the requirements of 502 00. (HTHS 2.9 mPas).
<b>VW 503 01</b>	Specification for turbocharged gasoline car engines with extended service intervals, e.g. Audi S3, TT. (HTHS > 3.5 mPas).
<b>VW 504 00</b>	New specification for vehicles with or without Longlife Service. For gasoline engines.
<b>VW 505 00</b>	All-season motor oils for diesel engines with or without turbo charging.
<b>VW 505 01</b>	All-season motor oils especially for Unit Injection diesel engines.
<b>VW 506 00</b>	Specification for diesel engines with extended service intervals (50,000 km or 2 years), HTHS 2.9 mPas.
<b>VW 506 01</b>	Specification for Unit Injection diesel engines with extended service intervals.
<b>VW 507 00</b>	New specification for vehicles with and without Longlife Service. For diesel engines fitted with particle filter systems.