



# SPECIFIC LL-01 FE

## 5W-30



**BMW Gasoline and Diesel engine oil**

**Approved BMW Long Life-01 FE**

**100% Synthetic**

### TYPE OF USE

100% Synthetic High Performance "Fuel Economy" Lubricant, specially designed for BMW and MINI vehicles, fitted with Gasoline engines meeting Euro 4, Euro 5 and Euro 6 emission standards, requiring a "FE – Fuel Economy" engine oil type and approved BMW Long-Life 01 FE.

Suitable for all types of fuels, Gasoline, leaded or unleaded, Ethanol, LPG, Diesel and biofuels. Compatible with catalytic converters.

Some engines may not be able use this type of oil, before use always check the owner's manual.

### PERFORMANCES

STANDARDS                      ACEA A5 / B5

APPROVALS                     BMW Long Life-01 FE

The BMW Long Life-01 FE standard imposes very severe constraints on lubricant, particularly because of Valvetronic and after-treatment systems. This standard LL-01 FE covers most BMW Gasoline engines from 2001 until 2004, requiring a "Fuel Economy" lubricant.

The standard BMW LL-01 FE also covers the previous BMW standards such as BMW LL-98.

For BMW Gasoline models from 2004, only in the countries of the European Union, Switzerland, Norway and Liechtenstein, use a BMW LL-04 approved product such as MOTUL 8100 X-CLEAN EFE 5W-30, 8100 X-CLEAN 5W-40, 8100 X-CLEAN+ 5W-30, or SPECIFIC LL-04 5W-40. In other countries, a BMW LL-01 lubricant such as 8100 X-CESS 5W-40 or 8100 X-MAX 0W-40 is to be recommended.

The BMW LL-01 FE standard also applies to some Gasoline engines, even recent ones, only outside the countries of the European Union, Switzerland, Norway and Liechtenstein: refer to BMW recommendations in case of doubt.

MOTUL SPECIFIC LL-01 FE 5W-30 is particularly resistant at high temperatures to allow better control of oil consumption and to reduce wear thanks to its excellent lubricating properties, while providing significant fuel economy. Provides excellent oil flow, instant oil pressure, faster engine revs-up and faster engine warm-up.

This type of lubricant helps reduce fuel consumption, thus reducing greenhouse gas (CO<sub>2</sub>) emissions to protect the environment.

### RECOMMENDATION

Drain interval: refer to manufacturers' recommendations and tune to your own use.

Avoid mixing with lubricants not BMW LL-01 FE compliant.

Before use always refer to the owner manual or handbook of the vehicle.

## **PROPERTIES**

Viscosity grade	SAE J 300	<b>5W-30</b>
Density at 20°C (68°F)	ASTM D1298	0.855
Viscosity at 40°C (104°F)	ASTM D445	63.5 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	10.7 mm <sup>2</sup> /s
Viscosity HTHS at 150°C (302°F)	ASTM D4741	3.4 mPa.s
Viscosity index	ASTM D2270	160
Pour point	ASTM D97	-42°C / -44°F
Flash point	ASTM D92	228°C / 442°F
Sulfated ash	ASTM D874	1.45% weight
TBN	ASTM D2896	11.1 mg KOH/g