



# 8100 X-clean 5W-30

DPF

**Gasoline & Diesel lubricant - EURO 5 and 6**

**100% Synthetic**

## TYPE OF USE

High performance 100% synthetic lubricant approved by many car manufacturers.

Specially designed for last generation cars, powered by turbo Diesel direct injection or Gasoline engines, EURO 4, EURO 5 or EURO 6 emission regulation compliant, requiring an ACEA C3 engine oil i.e. high HTHS ( $> 3.5$  mPa.s) viscosity and "Mid SAPS" with reduced content of sulphated ash ( $\leq 0.8\%$ ), phosphorus ( $0.07 \leq x \leq 0.09\%$ ) and sulphur ( $\leq 0.3\%$ ).

Compatible with catalytic converters and Diesel Particulate Filters (DPF).

Suitable for all type of fuels: Gasoline, Diesel, LPG, CNG and Biofuels.

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

## PERFORMANCES

STANDARDS

ACEA **C3**

PERFORMANCES

API **SM / CF**

APPROVALS

BMW **Long Life-04**

MB-Approval **229.51**

RECOMMENDATIONS

FIAT, HYUNDAI / KIA, NISSAN, RENAULT, SSANGYONG, SUZUKI ...

Engines compliant with EURO 4, EURO 5 and EURO 6 emission regulation are fitted with sensitive exhaust gas after treatment systems. Indeed, Sulfur and Phosphorus inhibit catalytic converters operation leading to inefficient exhaust gas treatment; and Sulfated Ashes clog DPFs leading to shorten regenerating cycle, quick oil aging, higher fuel consumption and engine power loss.

The ACEA C3 standard requests from the lubricant significant oil film resistance and low emission performance for powerful engines: MOTUL 8100 X-CLEAN 5W-30 has synthetic base stocks and dedicated SAPS levels that generates outstanding oil film resistance, reduces friction in the engine and provides after treatment devices compatibility. MOTUL 8100 X-CLEAN 5W-30 brings high lubricating properties such as wear protection and high temperature resistance for better controlled oil consumption. ACEA C3 lubricants achieve extended drain intervals managed by vehicles on-board computer.

Numerous OEMs such as FIAT, HYUNDAI / KIA, NISSAN, RENAULT, SSANGYONG, SUZUKI,... recommend an ACEA C3 lubricant for most of their vehicles especially Diesels with DPF.

The BMW Long Life-04 specification imposes severe constraints to the lubricant particularly due to Valvetronic and after treatment systems compatibility. It covers all BMW engines from 2004 and also all BMW engines before 2004 as BMW LL-04 covers all the previous BMW specifications such as BMW LL-98 and BMW LL-01.

ATTENTION: BMW LL-04 product can be used for gasoline engines only in European Union countries, Switzerland, Norway and Liechtenstein. Outside those countries, a BMW LL-01 approved lubricant such as MOTUL 8100 X-CESS 5W-40 or MOTUL 8100 X-MAX 0W-40 is required. Refer to BMW recommendation.

The MB 229.51 requires among many other severe constrains from the lubricant a reduced content of Sulfated Ash, Phosphorus and Sulphur in order to be compatible with MERCEDES exhaust gas after treatment systems. The specification MB 229.51 applies to some MERCEDES Gasoline engines, and to all MERCEDES Diesel engines, with or without DPF.

### **RECOMENDATIONS**

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

Do not mix with lubricants not ACEA C3 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	0.847
Viscosity at 40°C (104°F)	ASTM D445	70.8 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	12.0 mm <sup>2</sup> /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.5 mPa.s
Viscosity Index	ASTM D2270	166
Pour point	ASTM D97	-36°C / -32.8°F
Flash point	ASTM D92	230°C / 446°F
Sulfated ash	ASTM D874	0.79% weight
TBN	ASTM D2896	7.4 mg KOH/g