



Fuel Economy Gasoline and Diesel lubricant 100% Synthetic

### TYPE OF USE

**Fuel Economy Engine Oil**, 100% Synthetic, specially formulated for recent engines, Diesel or Gasoline, naturally aspirated or turbocharged, indirect or direct injection, requiring use of a low friction and low HTHS (High Temperature High Shear) viscosity oil.

Suitable for all modern engines powered with turbo Diesel or Gasoline engines requiring Fuel Economy lubricants (ACEA A1/B1 or ACEA A5/B5 standards). Compatible for catalytic converters.

This type of oil may be unsuitable for use in some engines. Always refer to the owner manual.

#### **PERFORMANCES**

#### **RECOMMENDATIONS**

### HONDA, LAND ROVER, VOLVO

The ACEA A5/B5 performance requests from the lubricant a real fuel economy and low emission performance for powerful engines: MOTUL 8100 Eco-nergy 0W-30 has synthetic base stocks and specific friction modifier molecules that provide outstanding oil film resistance, reduce friction in the engine, maintain the oil pressure, and generally decrease operating temperatures. MOTUL 8100 Eco-nergy 0W-30 provides outstanding lubricating properties such as wear protection and high temperature resistance for better controlled oil consumption along with up to 10% fuel economy during start up and short journeys around town (compare to a 15W-40 reference oil).

The API SP standard is fully backward compatible over API SN standard and all former API standards.

API SP lubricants provide outstanding oxidation resistance, better anti-deposits protection, better engine cleanliness, antiwear protection and enhanced performance at cold temperature for Fuel Economy savings during the whole oil life span. Besides being backward compatible, compare to API SN and API SN Plus, the API SP standard provides higher performance and especially adds protection against LSPI for downsized direct injection turbocharged gasoline engines.

The BMW Long Life-01 FE specification imposes severe constraints to the lubricant particularly due to the Valvetronic system. It covers some BMW engines from 2001 and some engines from 2004. BMW LL-01 FE norm covers also all former BMW specifications such as BMW LL-98.

The BMW LL-01 FE standard covers some Gasoline engines running <u>only</u> outside European Union countries, Switzerland, Norway and Liechtenstein. Refer to BMW recommendations when in doubt.





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The MB 229.6 specification requires to the lubricant to meet the ACEA A5/B5 standard, is particularly demanding in terms of engine cleanliness and Fuel Economy, and is used on certain Gasoline engines (M 270, M 274 and M 276 series) fitted on the Mercedes A, B and C Class (including certain AMG models) from 2011 to 2021.

The Volvo Car Corporation – VCC 95200377 specification imposes the engine oil to combine both ACEA A5/B5 and 0W-30 performance in order to perfectly lubricate most of their Naturally Aspirated and Turbocharged Gasoline engines (2.0L, 2.3L, 2.4L, 2.5L, 3.0L, 3.2L and 4.4L) produced from 2004.

Some other OEMs require also for their most recent Gasoline engines (since 2005) an ACEA A5/B5 and 0W-30 lubricant to guarantee the maximum Fuel Economy and durability performance. Examples of MOTUL 8100 Eco-clean 0W-30 possible use for these OEMs: HONDA 1.8L and 2.0L; and LAND ROVER 3.2L.

The ACEA A5/B5 performance requests from the lubricant a real fuel economy and low emission performance for powerful engines: MOTUL 8100 Eco-nergy 0W-30 has synthetic base stocks and specific friction modifier molecules that provide outstanding oil film resistance, reduce friction in the engine, maintain the oil pressure, and generally decrease operating temperature. MOTUL 8100 Eco-nergy 0W-30 provides high lubricating properties such as wear protection and high temperature resistance for better controlled oil consumption.

Viscosity grade SAE 0W-30 minimizes oil hydrodynamic friction, allowing fuel economy especially when oil is cold. Improves oil flow at start up, faster oil pressure build up, faster rev raisings and faster operating temperature reach.

Environment friendly, this type of oil allows fuel consumption reduction and therefore minimizes greenhouse gases (CO<sub>2</sub>) emissions.

#### RECOMMENDATIONS

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

MOTUL 8100 Eco-nergy 0W-30 can be mixed with synthetic or mineral oils.

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





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# **PROPERTIES**

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Viscosity grade	SAE J 300	0W-30
Density at 20°C (68°F)	ASTM D1298	0.841
Viscosity at 40°C (104°F)	ASTM D445	53.9 mm²/s
Viscosity at 100°C (212°F)	ASTM D445	10.1 mm²/s
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.1 mPa.s
Viscosity Index	ASTM D2270	179.0
Pour point	ASTM D97	-45.0 °C / -49.0 °F
Sulfated Ash	ASTM D874	% weight 1.04
TBN	ASTM D2896	12.40 mg KOH/g
Flash point	ASTM D92	222.0 °C / 432.0 °F





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STANDARDS	NDARDS	
ACEA	A5/B5	
API	SERVICE SP	
BMW	LL-01 FE	
VOLVO	VCC 95200377	
DEM PERFORMANCES		
MERCEDES-BENZ	MB-Approval 229.6	