



Fuel Economy Gasoline & Diesel lubricant Synthetic Technology

#### TYPE OF USE

Synthetic technology Fuel Economy - Mid-SAPS lubricant, recommended for new Euro 4, Euro 5 and Euro 6 engines requiring an ACEA C2 lubricant in SAE 0W-30 viscosity grade.

#### **PERFORMANCES**

#### RECOMMENDATIONS

HONDA, SUBARU, SUZUKI, TOYOTA

The API SP standard is fully backward compatible over API SN standard and all former API standards. The API SP-RC "Resource Conserving" specification is even more demanding on the energy saving requirements.

API SP lubricants provide outstanding oxidation resistance, better anti-deposits protection, better engine cleanliness, anti-wear 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.

Based on the API SP specification, the ILSAC GF-6A standard for viscosity grade 20 lubricants is even more severe especially on the Fuel Economy benefits performance. The requirements on the low viscosity "Fuel Economy" side of the lubricant, but also extended drain intervals, pistons/rings cleanliness, seals compatibility and reduced content of Phosphorus for after treatment systems compatibility are enhanced. The ILSAC GF-6A specification ensures perfect engine protection when gasoline containing up to 85% Ethanol is used (E85).

The BMW Longlife-12 FE standard is only suitable for BMW Diesel engines certified for this purpose and produced from model year 2014 (all 3-cylinder B37 engines, 4-cylinder engines from model year 2014 and 6-cylinder engines from model year 2013) fitted with one turbocharger maximum, and for all BMW Gasoline engines from model year 2002, and is restricted only to the European Union countries,

Norway, Switzerland and Liechtenstein. BMW LL-12 FE specification is not valid for engines fitted with 2 or 3 turbochargers. If in doubt, always refer to the owner manual of the vehicle.

The MB 229.61 standard is particularly demanding in terms of energy savings, and is recommended for some Gasoline and Diesel engines with particulate filters fitted in the Mercedes A, B and AMG GT class from 2018.

MB 227.61 is especially recommended for some Mercedes vehicles with CNG (compressed natural gas) engines.





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MOTUL 8100 ECO-CLEAN 0W-30 is a 100% Synthetic Fuel Economy engine lubricant specially formulated to ensure optimal lubrication of FORD Duratorg 1.5L, 1.6L and 2.0L Diesel engines requiring the specification FORD 950-A.

The FIAT 9.55535-GS1 and FIAT 9.55535-DS1 specifications impose the engine oil to combine both ACEA C2 and SAE 0W-30 performance in order to perfectly lubricate some of the latest generation of Gasoline (FIAT 9.55535-GS-1) and Diesel (FIAT 9.55535-DS-1) engines from Fiat Group (Fiat, Alfa-Romeo, Lancia).

Within the FCA Group (Fiat Chrysler Automobiles), the Chrysler MS-13340 and MS-90047 specifications respectively reflect these FIAT 9.55535-GS1 and DS1 specifications within CHYSLER.

The HONDA, TOYOTA, SUBARU and SUZUKI recommendations impose the engine oil to combine both ACEA C2 and 0W-30 qualities in order to guarantee the maximum Fuel Economy and durability performance for most of their Gasoline and Diesel engines of latest generation produced since 2006. Examples of MOTUL 8100 Eco-clean 0W-30 possible use for these OEMs: HONDA 2.2L CDTI and

i-DTEC; TOYOTA 2.0L and 2.2L D4D; SUBARU 2.0L D; and SUZUKI SX-4 S-Cross 1.6L DDIS.

Engines compliant with Euro 4, 5 and 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 C2 standard requests from the lubricant significant Fuel Economy and Low Emission performance for powerful engines: MOTUL 8100 Eco-clean 0W-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 Eco-clean 0W-30 brings high lubricating properties such as wear protection and high temperature resistance for better controlled oil consumption.

The 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 (CO2) emissions.





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### **RECOMMENDATIONS**

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

Do not mix with lubricants not ACEA C2 compliant.

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

### **PROPERTIES**

Viscosity grade	SAE J 300	0W-30
Density at 20°C (68°F)	ASTM D1298	0.842
	ASTM D445	50.8 mm²/s
Viscosity at 40°C (104°F)		
	ASTM D445	9.9 mm²/s
Viscosity at 100°C (212°F)		
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.1 mPa.s
	ASTM D2270	185.0
Viscosity Index		
	ASTM D97	-42.0 °C / -44.0 °F
Pour point		
Sulfated Ash	ASTM D874	
		% weight
		0.77
TBN	ASTM D2896	9.5 mg KOH/g
Flash point	ASTM D97	238.0 °C / 460.0 °F





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STANDARDS	
ACEA	C2
API	SERVICE SP-RC
BMW	LL-12 FE
FORD	WSS-M2C950-A
ILSAC	GF-6A
OEM PERFORMANCES	
CHRYSLER	MS 13340, MS 90047
FIAT	9.55535-DS1, 9.55535-GS1
MERCEDES-BENZ	MB 227.61, MB-Approval 229.61