

# MOTUL 8100 Eco-lite 5W-30



## **Fuel Economy Gasoline engine lubricant** 100% Synthetic

#### TYPE OF USE

100% Synthetic Fuel Economy engine oil specially formulated for recent gasoline engines, naturally aspirated or turbocharged, indirect or direct injection, designed to use engine oil with low friction and low HTHS (High Temperature High Shear) viscosity (≥ 2.9 mPa.s).

Suitable for modern gasoline engines requiring a viscosity grade 30 and fuel economy lubricant (API SN and/or ILSAC GF-5 standards).

Approved GM-dexos1™ GEN2 for all new GM gasoline engines requiring this approval: BUICK, CADILLAC, CHEVROLET, GM, GMC, OPEL and VAUXHALL.

Compatible with catalytic converters.

This type of oil may be unsuitable for use in some engines. Refer to the owner manual if in doubt.

#### **PERFORMANCES**

**STANDARDS** API SERVICE SN

ILSAC GF-5

GM dexos1<sup>™</sup> GEN2 under n° D10577HI011 **APPROVALS** 

**PERFORMANCES** CHRYSLER MS-6395

FORD M2C 929-A FORD M2C 946-A

RECOMMENDATIONS Gasoline engines: ACURA, CHRYSLER, DODGE, FORD, GENESIS,

HONDA, HYUNDAI, INFINITI, KIA, LEXUS, MAZDA, MITSUBISHI.

NISSAN, SUBARU, TOYOTA ...

The API SN standard is fully backward compatible over API SM standard and all former API

API SN 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.

Based on the API SN specification, the ILSAC GF-5 standard is even more severe especially on the energy saving criteria. The requirements on the low viscosity "Fuel Economy" side of the lubricant, but also extended drain intervals, clean pistons/rings, seals compatibility and reduced content of phosphorus for after treatment systems compatibility are enhanced. The ILSAC GF-5 specification ensures perfect engine protection when gasoline containing up to 85% Ethanol is used (E85).

GM dexos1<sup>™</sup> standard is suitable for the whole range of GM Gasoline engines from Model Year 2011 onwards requiring an approved dexos1 lubricant (except for service fill in Europe). Specification GM dexos1<sup>™</sup> is designed for use with gasoline engines and replaces GM-LL-A-025, GM 6094M and GM 4718M. GM dexos1™ is also backward compatible for pre-2011 GM gasoline vehicles.

GM dexos1<sup>™</sup> standard combines very stringent requirements from international standards like API, ACEA and ILSAC, together with specific GM requirements to prove Fuel Economy benefits and engine durability.

GM has developed its dexos1<sup>™</sup> standard in order for the oils to provide a high thermal stability and insure an outstanding resistance at high temperatures to avoid black sludge and viscosity increase that soot, coming from combustion residues, may create.

Turbocharged gasoline engines with direct injection have a certain risk of sporadic pre-ignition phenomena in the combustion chambers. This type of sporadic abnormal combustion resembles metallic noise from combustion chambers and is sometimes associated with a short power loss. This phenomenon called LSPI for Low Speed Pre-Ignition, or also Rumble, generates very high pressure peaks in the combustion chamber that can lead to piston damages and ultimately to engine destruction. For their latest-generation downsized gasoline engines, which are equipped with direct injection systems and turbochargers, GM has developed the dexos1™ GEN2 standard for engine lubricants in order to guarantee the perfect integrity of these gasoline engines facing the risk of these abnormal combustions.

MOTUL 8100 Eco-lite 5W-30 meets all these very highly demanding requirements of performance and durability set by GM, including in particular for dexos1 $^{\text{TM}}$  standard, the full compatibility to biofuels use such as LPG (Liquefied Petroleum Gas), CNG (Compressed Natural Gas), and bioethanol (as available at the station), when using ethanol biofuel at a mix ratio of up to 85% (Bioethanol – E85).

Some OEMs require for their most recent Gasoline engines an API SN and/or ILSAC GF-5 lubricant to guarantee the maximum performance and durability. The CHRYSLER specification MS-6395 (GF-4 level), FORD M2C 929-A (GF-4 level) and FORD M2C 946-A (GF-5 level) reflect these kind of requirements. Other examples of MOTUL 8100 Eco-lite 5W-30 possible use for these OEMs looking for Fuel Economy: HONDA, SUBARU and TOYOTA gasoline engines.

MOTUL 8100 Eco-lite 5W-30 provides high lubricating properties such as wear protection and high temperature resistance for better controlled oil consumption, improves oil flow at start up for faster oil pressure build up, faster rev raisings, faster operating temperature reach and fuel economy benefits.

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

#### **RECOMENDATIONS**

Drain interval: according to manufacturers' recommendations and tune to your own use. MOTUL 8100 Eco-lite 5W-30 can be mixed with synthetic or mineral oils. Before use always refer to the owner manual or handbook of the vehicle.

### **PROPERTIES**

Viscosity grade	SAE J 300	5W-30
Density at 20°C (68°F)	ASTM D1298	0.847
Viscosity at 40°C (104°F)	ASTM D445	67.0 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	11.4 mm <sup>2</sup> /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.3 mPa.s
Viscosity index	ASTM D2270	166
Pour point	ASTM D97	-39°C / -38°F
Flash point	ASTM D92	228°C / 464°F
Sulfated ash	ASTM D874	0.85% weight
TBN	ASTM D2896	8.5 mg KOH/g