

# 8100 Eco-lite 0W-20



## **Fuel Economy Gasoline engine lubricant**

## 100% Synthetic

### TYPE OF USE

**100% Synthetic "Fuel economy" engine oil** specially designed for recent gasoline engines, naturally aspirated or turbocharged, indirect or direct injection, designed to use oil with low friction and very low HTHS (High Temperature High Shear) viscosity (≥ 2.6 mPa.s).

Suitable for modern gasoline engines requiring a viscosity grade 20 and fuel economy lubricant (API SN PLUS, 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.

Catalytic converter friendly.

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

#### **PERFORMANCE**

STANDARDS API SERVICE SN Plus

ILSAC GF-5

APPROVALS GM dexos1™ GEN2 under n° D10833IE103

PERFORMANCES CHRYSLER MS-6395

FORD M2C 930-A FORD M2C 945-A

GM 6094A

RECOMMENDATIONS Gasoline engines: ACURA, HONDA, HYUNDAI, INFINITI, KIA, LEXUS,

MAZDA, MITSUBISHI, NISSAN, SUBARU, SUZUKI, TOYOTA...

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

Besides being backward compatible, compare to API SN, the API SN Plus standard provides higher performance and especially adds protection against LSPI for downsized direct injection turbocharged gasoline engines.

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<sup>™</sup> 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.

Likewise, the API SN Plus standard now fully covers this LSPI requirement in order to perfectly protect direct injection turbocharged gasoline engines.

Some OEMs require for their most recent Gasoline engines an API SN and ILSAC GF-5 lubricant to guarantee the maximum performance and durability. The specifications CHRYSLER MS-6395 (GF-4 level), FORD M2C 930-A (GF-4 level) and FORD M2C 945-A (GF-5 level) reflect these kinds of requirements.

MOTUL 8100 Eco-lite 5W-20 meets all these very highly demanding requirements of performance and durability set by GM, including in particular for dexos1<sup>™</sup> 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).

Viscosity grade SAE 5W-20 minimizes lubricant hydrodynamic friction, allows fuel economy benefits especially when the oil is cold.

Improves oil flow at start up, faster oil pressure build-up, faster rev raisings and reach operating temperature faster.

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

#### RECOMMENDATION

Drain interval: according to manufacturers' recommendations and tune to your own use. MOTUL 8100 Eco-lite 5W-20 can be mixed with synthetic or mineral oils. Before use always refer to the owner manual of the vehicle.

#### **PROPERTIES**

Viscosity grade	SAE J 300	5W-20
Density at 20°C (68°F)	ASTM D1298	0.847
Viscosity at 40°C (104°F)	ASTM D445	44.7 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	8.5 mm <sup>2</sup> /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.6 mPa.s
Viscosity index	ASTM D2270	170
Pour point	ASTM D97	-42°C / -44°F
Flash point	ASTM D92	236°C / 433°F
Sulfated ash	ASTM D874	0.85% weight
TBN	ASTM D2896	8.5 mg KOH/g