MOTUL 8100 ECO-LITE 0W-20

FUEL ECO

Fuel Economy Gasoline engine lubricant
Synthetic Technology

TYPE OF USE

Synthetic technology "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 SP-RC, API SP and/or ILSAC GF-6A standards).

Recommended for all GM gasoline engines requiring GM-dexos1™ GEN3 specification: 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.

PERFORMANCES

STANDARDS	API SERVICE SP-RC ILSAC GF-6A
PERFORMANCES	CHRYSLER MS 6395, FORD WSS-M2C947-A, FORD WSS-M2C947-B1, FORD WSS-M2C962-A1, FIAT 9.55535-CR1, GENERAL MOTORS GM dexos1 GEN3
RECOMMENDATIONS	ACURA, HONDA, HYUNDAI, INFINITI, KIA, LEXUS, MAZDA, MITSUBISHI, NISSAN, SUBARU, SUZUKI, TOYOTA

The API SP standard is fully backward compatible over API SN requirements 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 more protection against LSPI phenomenon 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 lubri-

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cant, 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 also ensures perfect engine protection when gasoline containing up to 85% Ethanol is used (E85).

GM dexos1™ 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™ 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™ 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™ 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 SP 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 SP-RC, API SP, API SN, SN-RC, SN Plus and ILSAC GF-6a or GF-5 lubricant to guarantee the maximum performance and durability. The specifications CHRYSLER MS-6395 (GF-4 level), FORD WSS-M2C947-A (GF-5 level) and FORD WSS-M2C947-B1 (GF-5, SN-RC et SN Plus levels) reflect these kinds of requirements.
Within the FCA Group (Fiat Chrysler Automobiles), the FIAT specification 9.55535-CR1 mirrors this CHYSLER MS-6395 specification at Fiat.

MOTUL 8100 Eco-lite 0W-20 meets all these very highly demanding requirements of performance and durability set by GM, including in particular for dexos1™ 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

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ratio of up to 85% (Bioethanol – E85).

Viscosity grade SAE 0W-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_2) emissions.

RECOMMENDATIONS

Drain interval: according to manufacturers' recommendations and tune to your own use.
MOTUL 8100 Eco-lite 0W-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	0W-20
Density at 20°C (68°F)		0.842
	ASTM D445	45.2 mm²/s
Viscosity at 40°C (104°F)		
	ASTM D445	8.4 mm²/s
Viscosity at 100°C (212°F)		
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.6 mPa.s
	ASTM D2270	162.0
Viscosity Index		
	ASTM D97	-42.0 °C / -44.0 °F
Pour point		
Sulfated Ash	ASTM D874	
		% weight
		0.84
TBN	ASTM D2896	8.4 mg KOH/g

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Flash point	ASTM D92	223.0 °C / 433.0 °F

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