



# 8100 Eco-clean 0W-20



**Fuel Economy Gasoline & Diesel lubricant**

**100% Synthetic**

## TYPE OF USE

High Performance 100% Synthetic "**Fuel Economy**" lubricant specially formulated for OEMs requiring engine oil with very low HTHS viscosity (High Temperature High Shear)  $\geq 2.6$  mPa.s. and "Mid SAPS" with reduced content of Sulfated Ash ( $\leq 0.8\%$ ), Phosphorus ( $0.07\% \leq x \leq 0.09\%$ ) and Sulfur ( $\leq 0.3\%$ ). Suitable for latest generation Gasoline and Diesel engines meeting Euro 4, 5 and 6 emission standards, when a lubricant of both viscosity grade 20 and "Fuel Economy" is required: ACEA C5, ACEA C6, API SP and/or ILSAC GF-6a Plus standards.

Suitable for Catalytic Converters, Gasoline Particulate Filter (GPF) and Diesel Particulate Filter (DPF). Some engines are not designed to use this type of lubricant, before use, consult the maintenance manual for your vehicle.

## PERFORMANCES

STANDARDS	ACEA C5/C6 API PERFORMANCE SP ILSAC GF-6A
APPROVALS	BMW LL-17 FE+ (backward compatible with BMW LL-14 FE+) MB-Approval 229.71 / 229.72 OPEL/VAUXHALL OV0401547
SPECIFICATIONS	JAGUAR LAND ROVER STJLR.03.5006
PERFORMANCES	CHRYSLER MS-12145 FIAT 9.55535-GSX / DSX FORD WSS-M2C947-B1 / 962-A1

The ACEA C5/C6 standard requires from the lubricant significant oil film resistance, LSPI protection and low emission performance during use in powerful engines. ACEA C5/C6 standard requires also friction reduction to ensure significant gains in energy savings, and therefore fuel economy benefits.

MOTUL 8100 ECO-CLEAN 0W-20, thanks to its 100% Synthetic base and reduced SAPS levels, makes it possible to obtain a very resistant oil film, to reduce the friction in the engine and to be compatible with modern after treatment systems.

The API SP standard is fully backward compatible over API SN requirements and all former API standards. Besides being backward compatible, API SP standard provides higher performance and 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 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 also ensures perfect engine protection when gasoline containing up to 85% Ethanol is used (E85).

The BMW Longlife-17 FE+ standard covers and replaces BMW Longlife-14 FE+ required by BMW and MINI gasoline engines fitted with GPF. BMW Longlife-17 FE+ standard is especially suitable for BMW N20 and Bx8 Gasoline engines produced from 2014 and used in the European Union countries, Norway, Switzerland, Liechtenstein, United States of America and Canada.

Associated with ACEA C5 standard for lubricants, MOTUL 8100 ECO-CLEAN 0W-20 provides significant energy savings (up to 3% compare to the BMW LL-01 reference lubricant) while exceeding robustness requirements of BMW LL-04 specification. This improved fuel economy and low emissions performance meet these OEMs requirements for CO<sub>2</sub> emissions reductions.

This 100% Synthetic engine oil has been specially formulated to ensure optimum lubrication of MERCEDES latest generation Gasoline and Diesel engines requiring the MB 229.71 or MB 229.72 standards.

Some MERCEDES latest generation high power output Gasoline and Diesel engines from MY2016, require a very specific lubricant because they are extremely stressed, handle higher load, run at increased temperatures while delivering similar performance levels or even better than the former generations of engines they replace.

The MB 229.71 and MB 229.72 standards are particularly demanding on the Fuel Economy performance and associated with the ACEA C5 and C6 standards for lubricants, MOTUL 8100 ECO-CLEAN 0W-20 provides significant fuel economy performance (up to 1.5% compare to a 5W-30 MB 229.51 reference oil). This improved energy saving, and low pollutant emissions lubricant make it possible to meet manufacturers' commitments, such as MERCEDES, in terms of CO<sub>2</sub> reduction.

MB-Approval 229.71 and 229.72 are unique approvals and as such are not backward compatible and do not cover any other MB standards.

OPEL/VAUXHALL being now part of PSA Groupe, the new Opel Vauxhall specification OV0401547 for new generation engines has been released to replace GM dexos2 gen2 which will continue only at GM and its related brands.

The STJLR.03.5006 specification covers many latest generation JAGUAR LAND ROVER V6, V8 and L4 Gasoline engines, including 3.0L 6-cylinder and 5.0L 8-cylinder gasoline engines, as well as Ingenium 4 cylinders requiring increased protection against LSPI.

The FIAT 9.55535-GSX and DSX specifications require the lubricant to be both SAE 0W-20 and Mid-SAPS in order to perfectly lubricate some latest generation of Gasoline and Diesel engines from FIAT (Fiat, Alfa-Romeo, Lancia), including especially the ALFA ROMEO Giulia and Stelvio 2.2 JTD and 1.6 Multijet Adblue.

Within the FCA Group (Fiat Chrysler Automobiles), the CHRYSLER MS-12145 specification mirrors the FIAT 9.55535-GSX specification at CHRYSLER.

Some most recent Gasoline engines require 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 FORD WSS-M2C947-B1 (GF-5, SN-RC and SN Plus levels) and 962-A1 (GF-6) reflect these kinds of requirements.

MOTUL 8100 ECO-CLEAN 0W-20 perfectly meets all these very high performance and durability requirements of these different car manufacturers. MOTUL 8100 ECO-CLEAN 0W-20 is particularly resistant at high temperatures for better control of oil consumption and reduced wear thanks to its excellent lubricating properties.

Viscosity grade 0W-20 reduces the hydrodynamic friction of the lubricant, resulting in fuel savings especially when the oil is cold.

Provides excellent oil circulation, instant oil pressure setting, faster engine revs-up and faster engine warm-up.

**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.

Do not mix with lubricants not ACEA C5 or C6 compliant.

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

## **PROPERTIES**

Viscosity grade	SAE J 300	<b>0W-20</b>
Density at 20°C (68°F)	ASTM D1298	0.842
Viscosity at 40°C (104°F)	ASTM D445	41.4 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	8.2 mm <sup>2</sup> /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.7 mPa.s
Viscosity index	ASTM D2270	177
Pour point	ASTM D97	-48°C / -54°F
Flash point	ASTM D92	220°C / 428°F
Sulfated ash	ASTM D874	0.77% weight
TBN	ASTM D2896	8.0 mg KOH/g

We retain the right to modify the general characteristics of our products in order to offer to our customers the latest technical development.

Product specifications are definitive from the order which is subject to our general conditions of sale and warranty.

MOTUL - 119 Bd Félix Faure - 93303 Aubervilliers Cedex - BP 94 - FRANCE. Tel: 33 1 48 11 70 00 - Fax: 33 1 48 33 28 79 - Web Site: [www.motul.com](http://www.motul.com)

09/21