

## 8100 ECO-CLEAN 0W-20



Fuel Economy Gasoline & Diesel lubricant Synthese-Technologie

#### TYPE OF USE

High Performance Synthese-Technologie **"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, API SN, SN-RC and/or API SN Plus standards.

Compatible with 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

API SERVICE SN Plus - SN-RC (Ressource Conserving)

ILSAC GF-5

APPROVALS BMW LL-17 FE+ (backward compatible with BMW LL-14 FE+)

MERCEDES-BENZ MB-Approval 229.71

OPEL OV0401547 VAUXHALL OV0401547

PERFORMANCES FIAT 9.55535-DSX, FIAT 9.55535-GSX

Engines compliant with Euro 4, 5 and 6 emission regulations are fitted with sensitive exhaust gas after treatment systems. Indeed, Sulfur and Phosphorus inhibit catalytic converter operation leading to inefficient exhaust gas treatment. Sulfated Ashes clog particulate filters leading to shorten regenerating cycles, quick oil aging, higher fuel consumption and engine power loss.

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

MOTUL 8100 ECO-CLEAN 0W-20, thanks to its Synthese-Technologie 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



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systems.

This Synthese-Technologie engine oil is formulated to lubricate perfectly the latest generation of BMW and MINI Gasoline engines, especially those fitted with GPF (Gasoline Particulate Filter) and requiring the specification BMW LL-17 FE+.

The BMW Longlife-17 FE+ standard is especially suitable for BMW N20 and Bx8 Gasoline engines produced from model year 2014 and used in the European Union countries, Norway, Switzerland and Liechtenstein, as well as United States of America and Canada. If in doubt, always refer to the owner manual of the vehicle.

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 Synthese-Technologie engine oil has been specially formulated to ensure optimum lubrication of MERCEDES latest generation Gasoline and Diesel engines requiring the MB 229.71 standard.

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 standard is particularly demanding on the Fuel Economy performance and associated with the ACEA C5 standard for lubricants, MOTUL 8100 ECO-CLEAN 0W-20 provides significant fuel economy performance (up to 1% compare to a reference 5W-30 MB 229.51 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 is a unique approval and as such is not backward compatible and does 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 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.

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.



# 8100 ECO-CLEAN 0W-20



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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.

#### **RECOMMENDATIONS**

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

Do not mix with lubricants not ACEA C5 compliant.

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

### **PROPERTIES**

Grade de viscosité	SAE J 300	0W-20
Densité à 20°C	ASTM D1298	0.837
Viscosité à 40°C (104°F)	ASTM D445	38.5 mm²/s
Viscosité à 100°C (212°F)	ASTM D445	8.0 mm <sup>2</sup> /s
Viscosité HTHS à 150°C (302°F)	ASTM D4741	2.7 mPa.s
Indice de viscosité	ASTM D2270	187
Point éclair	ASTM D92	226 °C / 439 °F
Point d'écoulement	ASTM D97	-45.0 °C / -49.0 °F
Cendres sulfatées	ASTM D874	0.80 % masse
TBN	ASTM D2896	8.0 mg KOH/g