

MOTUL 8100 X-cess 5W-30

Gasoline and Diesel engine oil

100% Synthetic

TYPE OF USE

High performance 100% Synthetic lubricant specifically designed for powerful and recent cars fitted with Gasoline and Diesel engines, naturally aspirated or turbocharged, indirect or direct injection.

Multipurpose product featuring numerous car maker approvals and specifications, especially recommended for vehicles still under warranty.

Suitable for all type of fuels: leaded or unleaded Gasoline, Ethanol, LPG, Diesel and biofuels. Compatible for catalytic converters.

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

PERFORMANCES

STANDARDS ACEA A3 / B4

API SERVICE SL / CF

APPROVALS BMW Long Life-01

MB-Approval 229.5 / 226.5 RENAULT RN0710 / RN0700

VW 502 00 - 505 00

The ACEA B4 performance requires an outstanding detergent/dispersant power and a better viscosity increase resistance due to soot produced by Direct Injection Diesel engines (except VW unit injector pump engines that require a VW 505 01 product such as MOTUL 8100 X-clean EFE 5W-30, MOTUL 8100 X-clean 5W-40 or MOTUL Specific 505 01 502 00 5W-40).

The BMW Long Life-01 specification imposes severe constraints to the lubricant particularly due to the Valvetronic system. It covers all BMW engines from 2001 and some engines from 2004. BMW LL-01 norm covers also all former BMW specifications such as BMW LL-98.

The BMW LL-01 standard covers all Gasoline engines running <u>only</u> outside European Union countries, Switzerland, Norway and Liechtenstein. Refer to BMW recommendations when in doubt.

MOTUL 8100 X-cess 5W-30 fulfills all the specifications of BMW Long Life-01 standard of the BMW Group for BMW, MINI and ROLLS-ROYCE vehicles with no exceptions i.e. for models before and after 2019. For models up to 2019, i.e. until end of 2018 only, MOTUL 8100 X-cess 5W-40 can also be used.

For BMW vehicles requiring an approved BMW LL-04 lubricant, use only products such as MOTUL 8100 X-clean+ 5W-30, MOTUL 8100 X-clean EFE 5W-30, MOTUL 8100 X-clean gen2 5W-40 or MOTUL Specific LL-04 5W-40.

The VW 502 00 and 505 00 standards are specially designed for vehicles of the VAG group (VOLKSWAGEN, AUDI, SKODA and SEAT) running on fixed oil drain intervals (15,000 km in Europe), fitted with Diesel engines, without Unit Pump Injector (Volkswagen PD), without Diesel Particulate Filter (DPF), or Gasoline engines.

The MERCEDES MB 229.5 standard is more stringent than 229.3 in terms of ageing and oil film resistance (extended drain interval: on-board computer), detergent/dispersant power (ACEA B4) and requests fuel economy performance: 1.7% fuel economy improvement versus a 15W-40 reference. The specification MB 229.5 applies to all MERCEDES Gasoline engines, except AMG (in 5W-40 viscosity grade) and except SLR model, and to all MERCEDES Diesel without DPF engines.

The specification MB 226.5 is similar to 229.5 and applies to MERCEDES Gasoline engines sourced from the MERCEDES/RENAULT-NISSAN partnership.

RENAULT has developed RN0700 and RN0710 standards for oils able to endure the most severe thermal constrains along with modern after treatment systems compatibility.

The Renault RN0700 standard applies to all Naturally Aspirated Gasoline engines (except Renault Sport) of RENAULT Group (Renault, Dacia, Samsung).

The RN0700 specification applies also to all RENAULT Diesel cars fitted with 1.5L dCi engines without DPF (Diesel Particulate Filter) having less than 100 hp output and 20 000 km or 1-year oil drain interval.

The Renault RN0710 standard applies to all turbocharged Gasoline, Renault Sport and Diesel without DPF engines of RENAULT Group (Renault, Dacia, Samsung).

The RN0710 specification does not apply to RENAULT Diesel cars fitted with 1.5L dCi engines without DPF having less than 100 hp output and 20 000 km or 1-year oil drain interval which specifically require a RN0700 lubricant. For the 2.2L dCi with DPF, use only an approved RN0710 lubricant, not a RN0720.

RECOMMENDATION

Drain interval: refer to manufacturers' recommendations and tune to your own use. MOTUL 8100 X-cess 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 | 0.849 |
| Viscosity at 40°C (104°F) | ASTM D445 | 69.1 mm ² /s |
| Viscosity at 100°C (212°F) | ASTM D445 | 11.9 mm²/s |
| HTHS viscosity at 150°C (302°F) | ASTM D4741 | 3.6 mPa.s |
| Viscosity Index | ASTM D2270 | 179 |
| Pour point | ASTM D97 | -45°C / -49°F |
| Flash point | ASTM D92 | 238°C / 460°F |
| Sulfated ash | ASTM D874 | 1.1% weight |
| TBN | ASTM D2896 | 10.2 mg KOH/g |