

**Gasoline and Diesel engine oil
Technosynthese®****TYPE OF USE**

Advanced synthetic Technosynthese® lubricant for High Performance and High Protection. Recommended for BMW as well as MERCEDES, RENAULT and VAG (VOLKSWAGEN, AUDI, SKODA and SEAT).

Specifically designed for powerful and recent cars fitted with Gasoline and Diesel engines, naturally aspirated or turbo-charged, indirect or direct injection.

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

PERFORMANCES

STANDARDS ACEA A3 / B4
API SERVICE SL

APPROVALS BMW LL-01

PERFORMANCES MERCEDES-BENZ MB 229.5, 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 engines that require a VW 505 01 product such as MOTUL Specific 505 01 502 00 5W-40, MOTUL 8100 X-clean EFE 5W-30 or MOTUL 8100 X-clean 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 only outside European Union countries, Switzerland, Norway and Liechtenstein. Refer to BMW recommendations when in doubt.

MOTUL 6100 SYN-ergy 5W-30 fulfills all the specifications of BMW Long Life-01 standard from 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 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 in viscosity grade 5W-30 applies to all MERCEDES Gasoline engines, except for AMG (in 5W-40 only) and SLR, and to all MERCEDES Diesel without DPF engines.

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.

Specifications VW 505 00 and especially VW 502 00 require outstanding detergent/dispersant power, high oil film resistance and better viscosity increase resistance (due to soot) in order to cover many VAG (VW, Audi, Skoda, Seat) Gasoline engines and some Diesel engines.

RECOMMENDATIONS

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

MOTUL 6100 SYN-ergy 5W-30 can be mixed with synthetic or mineral oils.

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



6100 SYN-ENERGY 5W-30

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Technosynthese®

PROPERTIES

Viscosity grade	SAE J 300	5W-30
Density at 20°C (68°F)	ASTM D1298	0.847
Viscosity at 40°C (104°F)	ASTM D445	68.6 mm ² /s
Viscosity at 100°C (212°F)	ASTM D445	11.2 mm ² /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.5 mPa.s
Viscosity Index	ASTM D2270	177.0
Flash point	ASTM D92	236.0 °C / 457.0 °F
Pour point	ASTM D97	-43.0 °C / -45.0 °F
Sulfated Ash	ASTM D874	1.10 % weight
TBN	ASTM D2896	10.2 mg KOH/g