

# 6100 SYN-nergy 5W-30

# Gasoline and Diesel engine oil

# **Technosynthese**<sup>®</sup>

## **TYPE OF USE**

Advanced Technosynthese® lubricant for High Performance and High Protection. Recommended for BMW as well as MERCEDES, RENAULT and VAG (Volkswagen, Audi, Skoda et Seat).

Specifically designed for powerful and recent cars fitted with Gasoline and Diesel engines, naturally aspirated or turbocharged, 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 <b>SN</b>	
APPROVALS	BMW <b>LL-01</b>	
PERFORMANCES	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, 8100 X-CLEAN 5W-40 or 8100 X-CLEAN FE 5W-30).

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.

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 to 2004 and also all the previous BMW specifications such as BMW LL-98. From 2004 BMW vehicles require a BMW LL-04 product such as Specific LL-04 5W-40, 8100 X-clean 5W-40, 8100 X-clean EFE 5W-30, or 8100 X-clean+ 5W-30. BMW LL-01 standard covers also all Gasoline engines running only outside European Union countries, Switzerland, Norway and Liechtenstein. Refer to BMW recommendations when in doubt.

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.

#### RECOMMENDATION

Drain interval: refer to manufacturers' recommendations and tune to your own use. MOTUL 6100 SYN-nergy 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 Density at 20°C (68°F) Viscosity at 40°C (104°F) Viscosity at 100°C (212°F) HTHS viscosity at 150°C (302°F) Viscosity Index Pour point Flash point Sulfated ash TBN	SAE J 300 ASTM D1298 ASTM D445 ASTM D4741 ASTM D2270 ASTM D97 ASTM D92 ASTM D874 ASTM D2896	<b>5W-30</b> 0.852 71.2 mm²/s 11.8 mm²/s 3.5 mPa.s 162 -38°C / -36°F 224°C / 435°F 1.1% weight 10.2 mg KOH/g
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