



MOTUL 6100 SYN-ENERGY SPEC 5W-40

**Gasoline and Diesel engine oil designed for European OEM standards
Technosynthese®**

TYPE OF USE

Advanced synthetic Technosynthese® lubricant for High Performance and High Protection. Recommended for most European OEMs such as MERCEDES and VAG (Volkswagen, Audi, Skoda, Seat and Cupra), as well as BMW, CHRYSLER, FORD, FIAT, PORSCHE, STELLANTIS (Peugeot, Citroën, DS), and RENAULT.

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

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 8100 X-CLEAN 5W-40).

Specifications VW 501 00 and VW 505 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 API SN standard is fully backward compatible over API SM standard and all former API standards. API SN lubricants provide outstanding oxidation resistance, better anti-deposits protection, better engine cleanliness, anti-wear protection and enhanced performance at cold temperature for Fuel Economy savings during the whole oil life span.

MOTUL 8100 X-cess 5W-40 meets the performance of the BMW Long Life-01 standard from the BMW Group for BMW, MINI and ROLLS-ROYCE vehicles until the model year 2019 i.e., up to End of 2018 only. For models from 2019 onward requiring an approved BMW LL-01 lubricant, products such as MOTUL 8100 X-cess 5W-30 or MOTUL 8100 X-cess GEN2 5W-40 must be used.

The CHRYSLER MS 12991 / MS 10725 / MS 10896 performance levels require engine oil to be synthetic while combining the API SM specification to perfectly lubricate some Gasoline and Diesel engines of CHRYSLER, DODGE, DODGE RAM and JEEP vehicles.

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.

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The FIAT 9.55535-H2, M2, N2 and Z2 performance levels impose the engine oil to combine both ACEA A3/B4 standard and 5W-40 viscosity grade in order to perfectly lubricate most of the Gasoline and Diesel engines of FIAT, ALFA-ROMEO, and LANCIA produced before July 2007, especially Twin Turbo Diesel engines (FIAT 9.55535-Z2).

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, including AMG (in 5W-40 viscosity grade) except SLR, 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.

PSA has developed B71 2296 standard in order for the oils to provide high thermal stability and insures an outstanding resistance at high temperatures to avoid black sludge and viscosity increase that soot, coming from combustion residues, may create.

PSA B71 2296 specification is suitable for some PSA Gasoline and Diesel engines requiring this specific standard: Always refer to the recommendation of your service booklet.

The Porsche A40 standard requires extreme high shear resistance from the lubricant. This specification applies to all PORSCHE engines, except Cayenne V6 and Diesel versions (for these specific engines, use an approved Porsche C30 lubricant such as MOTUL 8100 X-clean+ 5W-30).

RENAULT has developed RN0700 and RN0710 standards for oils able to endure the most severe thermal constraints 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.



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RECOMMENDATIONS

Drain interval: refer to manufacturers' recommendations and tune to your own use.
MOTUL 6100 SYN-ergy SPEC 5W-40 can be mixed with synthetic or mineral oils.
Before use always refer to the owner manual or handbook of the vehicle.

PROPERTIES

Viscosity grade		5W-40
Density at 20°C (68°F)		0.854
		86.2 mm²/s
Viscosity at 40°C (104°F)		14.5 mm²/s
Viscosity at 100°C (212°F)		
HTHS viscosity at 150°C (302°F)	ASTM D4741	3.7 mPa.s
	ASTM D2270	169.0
Viscosity Index		
		-34.0 °C / -29.0 °F
Pour point		
Sulfated Ash		
		% weight
		1.10
TBN		10.1 mg KOH/g
Flash point		229.0 °C / 444.0 °F

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STANDARDS	
ACEA	A3/B4
API	PERFORMANCE SN
OEM PERFORMANCES	
BMW	LL-01 <2019
CHRYSLER	MS 10725, MS 10896, MS 12991
FIAT	9.55535-H2, 9.55535-M2, 9.55535-N2, 9.55535-Z2
MERCEDES-BENZ	MB 229.5
PORSCHE	A40
RENAULT	RN0710 - RN0700
VW	502 00 505 00
PRODUCTS	
PSA Groupe	PSA B71 2296

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