

## RAVENOL VMO SAE 5W-40

Art. 1111133

MID SAPS

CleanSynto®

### Description:

**RAVENOL VMO SAE 5W-40** is universal fully synthetic low friction motor oil based on PAO Poly-alpha-olefins. Special formulation developed for use in passenger car with petrol and diesel engines (also with pump-jet technology Pumpe-Düse-Technik). Energy conserving.

**RAVENOL VMO SAE 5W-40** achieves by its formulation with special base oils a high viscosity index. The excellent cold start behaviour ensures an optimal lubrication safety in the cold running phase. Due to a significant fuel economy **RAVENOL VMO SAE 5W-40** contributes by reduction of emissions to conservation the environment. Minimal wear extends the lifespan of the engine. Extend oil change intervals according to manufacturer requirements.

**RAVENOL VMO SAE 5W-40** extends long life of DPF and TCW. Fulfils EURO IV and EURO V standards for exhaust reducing.

### Application Directions:

**RAVENOL VMO SAE 5W-40** is universal synthetic low friction motor oil especially developed for pump-jet diesel engines. Moreover, this lubricant is excellent suitable for gasoline and diesel engines in passenger cars and vans with and without turbo charger. Due to the specific composition is **RAVENOL VMO SAE 5W-40** excellent suitable for use for several of the latest OEM requirements.

### Quality Classification:

**RAVENOL VMO SAE 5W-40** is approved, tried and tested for aggregates specifying:

Specifications: API SN/SM/CF, ACEA A3/B4, C3

License: API SN

Approvals: MB-Approval 229.31, VW 502 00 / 505 00 / 505 01

Recommendations: BMW Longlife-04, Porsche A40, Ford WSS-M2C917-A, Fiat 9.55535-S2

Audi/Volkswagen G 052 167 M2, G 052 167 M4 (MX), G 052 167 M6 (MX), BMW 81 22 9 407 002,

BMW 81 22 9 407 029, BMW 81 22 9 407 547, Mercedes Benz 000 989 82 01

### Technical Characteristics:

**RAVENOL VMO 5W-40** offers:

- Fuel economy in part and full power operation
- Excellent wear protection and high viscosity index also under high-speed driving conditions, the long life of the engine
- Excellent cold starting characteristics also at low temperatures below -30°C
- The function of the hydro tappet is ensure at all temperatures
- A safe lubricant film at high operating temperatures
- Low evaporative tendency, so lower oil consumption
- No deposits in combustion chambers, in the piston ring zone and valves because of oil conditioned
- Neutrality towards sealing materials
- Extended oil change intervals to protect natural resources

### Technical Values:

Characteristics		unit	data	test according to
<b>Colour</b>			yellow brown	visual
<b>Density</b>	at 20°C	kg/m <sup>3</sup>	859	EN ISO 12185
<b>Viscosity</b>	at 40°C	mm <sup>2</sup> /s	83	DIN 51 562
	at 100°C	mm <sup>2</sup> /s	13,8	DIN 51 562
<b>Viscosity index VI</b>			182	DIN ISO 2909
<b>Flash point (COC)</b>		°C	225	DIN ISO 2592
<b>Pour point</b>		°C	-39	DIN ISO 3016
<b>TBN</b>		mg KOH/g	7,7	DIN ISO 3771
<b>Sulphated ash</b>		% wt.	0,77	DIN 51 575

All indicated data are approximate values and are subject to the commercial fluctuations.