



## RAVENOL VMO SAE 5W-40



**VISCOSITY** 5W-40

**SPECIFICATIONS** API SN | API CF | ACEA C3

**FABRICATION** SYNTHETIC

**APPROVALS** MB-FREIGABE 229.31 | BMW LONGLIFE-04 | GM DEXOS 2 | MB-APPROVAL 229.51 | VW 505 00 | VW 505 01 | LICENSE: API SN

**RECOMMENDATIONS** PORSCHE A40 | FORD WSS-M2C917-A | FIAT 9.55535-S2 | FIAT 9.55535-GH2 | CHRYSLER MS-11106 | VW 502 00

### ART.-NR. 1111133

1 L	1111133-001
4 L	1111133-004
5 L	1111133-005
10 L	1111133-010
20 L	1111133-020
20 L	1111133-B20
60 L	1111133-060
60 L	1111133-D60
208 L	1111133-208
208 L	1111133-D28
1000 L	1111133-700

**RAVENOL VMO SAE 5W-40** is a synthetic Mid SAPS low friction motor oil with CleanSynto® technology for passenger car gasoline and diesel engines with and without turbo-charging and direct injection.

**RAVENOL VMO SAE 5W-40** achieves a high viscosity index through its formulation with special base oils. The excellent cold start behaviour provides an optimum lubricating safety during the cold run phase.

**RAVENOL VMO SAE 5W-40** extends long life of DPF and TWC. Developed for fuel economy and energy conserving in EURO VI, EURO V and EURO IV Standard engines with normal and extended oil change intervals (until 50.000 km or 2 years possible).

**RAVENOL VMO SAE 5W-40** minimizes friction, wear and fuel consumption with excellent cold start characteristics. Because of a considerable fuel saving **RAVENOL VMO SAE 5W-40** contributes to protect the environment by reducing the emissions.

Suitable for extended oil change intervals where recommended by manufacturer.

## Application Notes

**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.

## Characteristics

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

- Fuel economy in part and full power operation
- MID SAPS = reduced Sulphated Ash, Phosphorous and Sulphur
- 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

Property	Unit	Data	Audit
Density at 20°C	kg/m <sup>3</sup>	848,0	EN ISO 12185
Colour		gelbbraun	visual
Viscosity at 100°C	mm <sup>2</sup> /s	14,4	DIN 51 562
Viscosity at 40°C	mm <sup>2</sup> /s	87,5	DIN 51 562
Viscosity index VI		171	DIN ISO 2909
HTHS at 150°C	mPa*s	3,75	ASTM D5481
CCS Viscosity at -30°C	mPa*s	6375	ASTM D5293
Low Temp. Pumping viscosity (MRV) at -35°C	mPa*s	21.100	ASTM D4684
Pourpoint	°C	-45	DIN ISO 3016
Noack Volatility	% M/M	8,8	ASTM D5800/b
Flash point	°C	242	DIN ISO 2592
TBN	mg KOH/g	7,2	ASTM D2896
Sulphated ash	%wt.	0,77	DIN 51 575

All information correspond to the best of our knowledge to the actual situation of the cognitions and our development. Subject to alterations. All references made to DIN-norms are only for the description of the goods. There is no guarantee. In case there will be any problems please contact the technical service.

Release: : 11. March 2020