Ravensberger Schmierstoffvertrieb GmbH Postfach 1163

Tel.: 05203/9719-0 Fax.: 05203/9719-40 / 41

- Certificate / ProductInformation -

RAVENOL VMP SAE 5W-30

Art. 1111122

33819 Werther

MID SAPS CleanSynto®

Description:

RAVENOL VMP SAE 5W-30 is a fully synthetic, fuel economy low friction motor oil with CleanSynto® and Mid SAPS Technology for latest petrol and diesel passenger cars with and without turbo charging in passenger cars and transporters with extended oil change.

RAVENOL VMP SAE 5W-30 is based on additives with reduced ash content for use in modern passenger car with diesel and gasoline engines with excellent cold start characteristics, low oil consumption and reduced pollutant emissions. This oil will increase the DPF and TWC life. Developed for fuel economy and energy conserving in EURO IV and EURO V Standard engines with normal and extended oil change intervals (until 50.000 km or 2 years possible).

RAVENOL VMP SAE 5W-30 achieved by its formulation with special base oils a high viscosity index. The excellent cold start behaviour ensures a optimal lubrication safety in the cold running phase.

Due to a significant fuel economy **RAVENOL VMP SAE 5W-30** contributes by reduction of emissions to conservation the environment. Minimal wear extends the lifespan of the engine.

Application Directions:

RAVENOL VMP SAE 5W-30 is a universal fuel economy, especially collected engine oil for modern gasoline and diesel engines with and without turbo charger in passenger cars and vans with extended oil change intervals. Extend the lifespan of the particle filter. Due to the specific composition is RAVENOL VMP SAE 5W-30 excellent suitable for use for several of the latest OEM requirements.

Quality Classification:

RAVENOL VMP SAE 5W-30 is approved, tried and tested for aggregates specifying:

<u>Specifications</u>: ACEA A3/B4, C3 <u>License</u>: API SM Energy Conserving

Approvals: BMW Longlife-04, VW 504 00 / 507 00 (for Europe and North America), MB-Approval 229.51

Recommendations: MB 229.31, Porsche C30 (Cayenne V6 (except China) and Cayenne Diesel), Fiat 9.55535-S1

Audi/Volkswagen G 052 195 M2, G 052 195 M4, G 052 195 M6, BMW 83 21 0 398 507, BMW/Mini 83 21 0 398 508,

Mercedes Benz 000 989 89 01 10

Technical Characteristics:

RAVENOL VMP SAE 5W-30 offers:

- Fuel economy in part and full power operation
- MID SAPS = reduced Sulphated ash, Phosphor and Sulfur
- 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 -25°C
- 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:

Technical Va	ilues.			
Characteristics		unit	data	test according to
Colour			mid brown	visual
Density	at 20°C	kg/m³	851	EN ISO 12185
Viscosity	at -30°C	mPa*s	5300	ASTM D5293
-	at 40°C	mm²/s	71,2	DIN 51 562
	at 100°C	mm²/s	12,09	DIN 51 562
Viscosity index VI			168	DIN ISO 2909
Flash point (COC)		°C	235	DIN ISO 2592
Pour point		°C	-40	DIN ISO 3016
Noack Volatility		%	9,8	ASTM D5800/b

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

To the best of our knowledge all information reflects the current state of findings and our development. Subject to change. Any reference to DIN standards are solely for product description purposes and do not represent a guarantee. If problems occur please consult a technician.