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- Certificate / ProductInformation -

**RAVENOL HLS SAE 5W-30**

Art. 1111119

Mid SAPS

CleanSynto®

**Description:**

**RAVENOL HLS SAE 5W-30** is fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection. Minimisation of friction, abrasion and fuel consumption, excellent cold start characteristics. Extended oil change intervals according to manufacturer's recommendations.

The excellent cold start characteristics provide optimal lubricant safety in the cold-running phase. Because of the noticeable fuel economy **RAVENOL HLS SAE 5W-30** contributes the reduction of pollutant emissions and protecting the environment. **RAVENOL HLS SAE 5W-30** is Mid SAPS Oils which prevents effectively the reset of the diesel soot particulate filter.

**Application Directions:**

**RAVENOL HLS SAE 5W-30** is suitable for demanding motors as a high performance low friction multi-grade gear oil. It is recommended for all modern passenger car gasoline and diesel engines, including turbo versions, for direct injection motors and it is also recommended for all operation conditions. Especially formulated according to the OPEL specification with dexos2 specification. **RAVENOL HLS SAE 5W-30** is recommended for use in vehicles with diesel particulate filters.

**Quality Classification:**

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

Specifications: API SN/SM(EC)/SL/CF, ACEA C3

License: API SM Energy Conserving, API SL

Approval: MB-Approval 229.51, BMW Longlife-04, GM dexos2 (License No. GB2C0711081), GMW 16177

Recommendations: MB 229.31, VW 502 00 / 505 00 / 505 01, Fiat 9.55535-S3, Chrysler MS-11116

**Technical Characteristics:**

**RAVENOL HLS SAE 5W-30** offers:

- Noticeable Fuel-Economy (FE)
- Low evaporation loss
- Excellent detergent and dispersant property
- Prevention of black sludge formation
- Improved cleaner engine
- Extended endurance because of oxidation stability
- Excellent cold start characteristics
- Excellent viscosity-temperature- characteristics
- Low evaporation tendency
- Suitable for catalyts
- Prevents effectively the reset of the diesel soot particulate filter

**Technical Values:**

Characteristics		unit	data	test according to
<b>Colour</b>			brown	visual
<b>Density</b>	at 20°C	kg/m <sup>3</sup>	852	EN ISO 12185
<b>Viscosity</b>	at 40°C	mm <sup>2</sup> /s	67,0	DIN 51 562
	at 100°C	mm <sup>2</sup> /s	11,7	DIN 51 562
<b>Viscosity index VI</b>			171	DIN ISO 2909
<b>Flash point (COC)</b>		°C	210	DIN ISO 2592
<b>Pour point</b>		°C	-36	DIN ISO 3016
<b>TBN</b>		mg KOH/g	7,2	DIN ISO 3771

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.

02.11.15