Ravensberger Schmierstoffvertrieb GmbH Postfach 1163 33819 Werther

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

- Certificate / ProductInformation -

RAVENOL HCS SAE 5W-40

Art.1112105

Hydrocrack CleanSynto®

Description:

RAVENOL HCS SAE 5W-40 is a synthetic high performance low friction oil, which ensures the fuel efficient motors operation. Hydrocrack oils and innovative additives, matched them to allow the compliance of the actuell practice requirements. The extremely low cold viscosity with the safer high-temperature viscosity ensures a high fuel efficient potential.

RAVENOL HCS SAE 5W-40 corresponds the high-tech-claims of the youngest efficient motor generations and is suitable for extended oil change intervals.

Application Directions:

RAVENOL HCS SAE 5W-40 is suitable for an energy saving all year use for all modern passenger car gasoline and diesel engines, including turbo versions and for direct injection motors and also recommended for all operation conditions.

Quality Classification:

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

Specification: ACEA A3/B4, API SM/SL/CF

License: API SM, API SL

Approvals: MB-Approval 229.3, BMW Longlife-98, RENAULT RN0700, RN0710

Recommendations: VW 502 00 / 505 00, Opel GM-LL-B-025, Porsche

Technical Characteristics:

RAVENOL HCS SAE 5W-40 offers:

- High protection against wear
- Fuel economy by low friction property
- Excellent detergent- and dispersant property
- Prevention of black sludge formation
- Improved cleaner engine
- Extended lifetime because of oxidation stability
- Excellent cold starting characteristics
- Excellent viscosity-temperature- characteristics
- Low evaporation tendency
- Catalyst cleaning

Technical Values:

| | unit | data | test according to |
|----------|---|---|---|
| | | brown | visual |
| at 20°C | kg/m³ | 846 | EN ISO 12185 |
| at 40°C | mm²/s | 89,3 | DIN 51 562 |
| at 100°C | mm²/s | 14,1 | DIN 51 562 |
| x VI | | 163 | DIN ISO 2909 |
| OC) | °C | 210 | DIN ISO 2592 |
| | °C | -40 | DIN ISO 3016 |
| | mg KOH/g | 11,0 | DIN ISO 3771 |
| | % wt. | 1,0 | DIN 51 575 |
| | at 20°C at 40°C at 100°C x VI OC) | at 20°C kg/m³ at 40°C mm²/s at 100°C mm²/s x VI OC) °C °C mg KOH/g | brown at 20°C kg/m³ 846 at 40°C mm²/s 89,3 at 100°C mm²/s 14,1 x VI 163 OC) °C 210 °C -40 mg KOH/g 11,0 |

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