Ravensberger Schmierstoffvertrieb GmbH Postfach 1163 33819 Werther

Tel.: +49/5203/9719-0 Fax.: +49/5203/9719-42

- Certificate / ProductInformation -

RAVENOL VSE SAE 0W-20

Art. 1111112

FULLY SYNTHETIC

USVO® & CleanSynto®

Description:

RAVENOL VSE SAE 0W-20 is a PAO (Poly-alpha-olefin) based fully synthetic low friction motor oil with especially USVO® and proven CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.

Due to the USVO® technology we achieve an extremely high viscosity stability. We avoid the disadvantages of polymeric viscosity improvers while taking advantage of them. This improves engine protection, performance, engine cleanliness and oil drain intervals. The USVO® technology makes it possible that the product has no shear losses during the entire change interval and is extremely stable to oxidation. This unique technology helps oil to be lubricated faster, thereby minimizing friction while keeping the engine clean and efficient.

RAVENOL VSE SAE 0W-20 minimizes friction, wear and fuel consumption with excellent cold start characteristics.

RAVENOL VSE SAE 0W-20 has a high viscosity index because of its formulation with special base oils. The formulation contains chemical marker for identification and is green colored.

The excellent cold start behavior ensures optimum lubrication safety during the cold running phase.

RAVENOL VSE SAE 0W-20 ensures compliance with the viscosity class even with a long oil life over the entire change interval.

By significantly reducing fuel consumption, **RAVENOL VSE SAE 0W-20** helps to protect the environment by reducing emissions.

Extended oil change intervals according to the manufacturer's instructions.

Application Directions:

RAVENOL VSE SAE 0W-20 is universal fuel-economy engine oil, suitable for all modern passenger car gasoline and diesel engines where this grade of oil is recommended.

RAVENOL VSE SAE 0W-20 is specially developed for the latest Volkswagen Specification VW 508 00 / 509 00 (VW Blue Oil).

Quality Classification:

RAVENOL VSE SAE 0W-20 is approved, tried and tested for aggregates specifying:

Specifications: ACEA C5

Approval: VW 508 00 / 509 00; Porsche C20

Technical Characteristics:

RAVENOL VSE SAE 0W-20 offers:

- Guaranteed fastest possible lubrication of the engine.
- High fuel economy (FE) effect due to the base oils and additives used. Low volatilization tendency, thereby lower oil consumption.
- Provides protection against sludging, coking, varnish and corrosion even under unfavorable operating conditions. No oil-related deposits in combustion chambers in the piston ring zone and on valves.
- Lowered HTHS viscosity for maximum fuel economy.
- Stable engine oil, no NOx oxidation.
- · Good soot absorption and dispersion.
- Neutral towards sealing materials.
- Contains chemical markers for identification and is green colored.

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.

27.02.19 Page 1 from 2

Ravensberger Schmierstoffvertrieb GmbH Postfach 1163 33819 Werther

Tel.: +49/5203/9719-0 Fax.: +49/5203/9719-42

- Certificate / ProductInformation -

RAVENOL VSE SAE 0W-20

Art. 1111112

FULLY SYNTHETIC

USVO® & CleanSynto®

Technical Values:

Characteristics	Unit	Data	Test according to
Density at 20°C	kg/m³	833,0	DIN 51757
Colour		green	visual
Viscosity at 100°C	mm²/s	8,0	DIN 51562-1
Viscosity at 40°C	mm²/s	39,2	DIN 51562-1
Viscosity Index VI		182	DIN ISO 2909
HTHS Viscosity at 150°C	mPa*s	2,73	ASTM D5481
CCS Viscosity at -35°C	mPa*s	3250	ASTM D5293
Low Temp. Pumping viscosity (MRV) at -40°C	mPa*s	8.340	ASTM D4684
Pourpoint	°C	-60	DIN ISO 3016
Noack Volatility	% M/M	10,4	ASTM D5800/b
Flashpoint	°C	240	DIN ISO 2592
TBN	mg KOH/g	8,3	ASTM D2896
Sulphated ash	%wt.	0,77	DIN 51575

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.

27.02.19 Page 2 from 2