



## RAVENOL SFE SAE 5W-20

RAVENOL Super Fuel Economy SFE SAE 5W-20 is an universal fuel-efficient engine oil, a top-quality product for modern passenger cars with gasoline and diesel engines of the latest generation.

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 Super Fuel Economy SFE SAE 5W-20 utilizes the positive properties of tungsten to smooth the surface structure of the motor, reducing friction and wear, and significantly improving mechanical efficiency.

RAVENOL Super Fuel Economy SFE SAE 5W-20 has a high viscosity index because of its formulation with special base oils. The formulation avoids premature fuel ignition LSPI (Low Speed Prevention), thereby avoiding engine damage. Recommended for turbo gasoline engines with direct injection (Turbo-GDI).

Because of a considerable fuel saving RAVENOL Super Fuel Economy SFE SAE 5W-20 contributes to protect the environment by reducing the emissions.

RAVENOL Super Fuel Economy SFE SAE 5W-20 minimizes friction, wear and fuel consumption with excellent cold start characteristics.

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

### Application Notes

RAVENOL SFE 5W-20 is an universal fuel-efficient engine oil, a top-quality product for modern passenger cars with gasoline engines of the latest generation.

### Quality Classifications

#### Specifications

API SN (RC), ILSAC GF-5, ACEA A5/B5, Lizenziert: API SN Resource Conserving, ILSAC GF-5

#### Approvals

Jaguar Land Rover STJLR.03.5004

#### Practice and tested in aggregates with filling

Meets FORD WSS-M2C930-A, FORD WSS-M2C930-B (extended drain capability), Ford WSS-M2C925-A/B, Ford WSS-M2C948-B, Chrysler MS-6395, Nissan, MAZDA, Suzuki, Toyota, Fiat 9.55535-CR1, Honda/Acura HTO-6

#### Characteristic

RAVENOL Super Fuel Economy SFE SAE 5W-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.
- Ensures the function of the hydraulic tappets at all temperatures.
- Stable engine oil, no NOx oxidation.
- Good aging behavior, confirmed by the Hot Tube Test.
- Good soot absorption and dispersion.
- Neutral towards sealing materials.
- Protectsturboscharger, EPS and engines running with ethanol-containing fuels up to E85.
- Compatibilitywith exhaust gas after treatment systems.

Characteristics	Unit	Data	Audit
Density at 20°C	kg/m <sup>3</sup>	843,0	EN ISO 12185
Colour		brown	visual
Viscosity at 100°C	mm <sup>2</sup> /s	8,5	DIN 51 562
Viscosity at 40°C	mm <sup>2</sup> /s	47,2	DIN 51 562
Viscosity index VI		160	DIN ISO 2909
HTHS at 150°C	mPa*s	2,9	CEC L-036-90
CCS Viscosity at -30°C	mPa*s	3640	ASTM D5293
Low Temp. Pumping viscosity (MRV) at -35°C	mPa*s	6.700	ASTM D4684
Pourpoint	°C	-63	DIN ISO 3016
Noack Volatility	% M/M	8,3	ASTM D5800/b
Flash point	°C	238	DIN ISO 2592
TBN	mg KOH/g	8,8	ASTM D2896

Characteristics	Unit	Data	Audit
Sulphated ash	%wt.	1,07	DIN 51 575

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

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.

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