



## RAVENOL ECS SAE 0W-20

RAVENOL Eco Synth ECS 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 Eco Synth ECS SAE 0W-20 utilizes the positive properties of tungsten to smooth the surface structure of the motor, reducing friction and wear, and significantly improving mechanical efficiency.

With its new formulation, RAVENOL Eco Synth ECS SAE 0W-20 provides a safe layer of lubrication even at very high operating temperatures and protects from corrosion and loss of oil through oxidation or coking. The excellent cold start behavior ensures optimum lubrication safety during the cold running phase.

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

RAVENOL Eco Synth ECS SAE 0W-20 therefore minimizes friction, wear and tear and fuel consumption, and delivers excellent cold start performance. HTHS min. 2,6 mPa\*s.

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

### Application Notes

RAVENOL Eco Synth ECS 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.

### **Specifications**

API SN (RC), ILSAC GF-5, ACEA A1/B1, C5, Lizensiert: API SN Resource Conserving, ILSAC GF-5

### **Approvals**

MB-Freigabe 229.71, Jaguar Land Rover STJLR.51.5122

### **Practice and tested in aggregates with filling**

Ford WSS-M2C947-A, GM dexos1® (First Generation), GM 6094 M, Chrysler MS-6395, Mitsubishi, MAZDA, Suzuki, Toyota, Honda/Acura HTO-6, Subaru, Nissan, Lexus, Infiniti, Cadillac, Chevrolet, Buick

### **Characteristic**

RAVENOL Eco Synth ECS 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.
- 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.

Characteristics	Unit	Data	Audit
Density at 20°C	kg/m³	839,0	EN ISO 12185
Colour		brown	visual
Viscosity at 100°C	mm²/s	7,9	DIN 51 562
Viscosity at 40°C	mm²/s	43,1	DIN 51 562
Viscosity index VI		156	DIN ISO 2909
HTHS at 150°C	mPa*s	2,64	ASTM D5481
CCS Viscosity at -35°C	mPa*s	4890	ASTM D5293
Low Temp. Pumping viscosity (MRV) at -40°C	mPa*s	10.000	ASTM D 4684
Pourpoint	°C	-63	DIN ISO 3016
Noack Volatility	% M/M	7,4	ASTM D5800/b
Flash point	°C	240	DIN ISO 2592
TBN	mg KOH/g	9,9	ASTM D2896
Sulphated ash	%wt.	1,0	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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