

### - Certificate / Product Information -



## **RAVENOL EFS SAE 0W-20**

RAVENOL Eco Synth EFS SAE 0W-20 is a PAO (Polyalphaolefin) 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.

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

With its new formulation, RAVENOL Eco Synth EFS 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 EFS SAE 0W-20 helps to protect the environment by reducing emissions.

**RAVENOL Eco Synth EFS SAE 0W-20** helps to avoid low speed pre-ignition LSPI (Low Speed ??Pre-ignition). This can help avoid engine damage. Extended oil change intervals according to the manufacturer's instructions.

#### **Application Notes**

RAVENOL Eco Synth EFS 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 Plus (RC), ILSAC GF-5, ACEA C5

#### **Approvals**

BMW Longlife-17 FE+, VOLVO VCC RBS0-2AE 0W-20 - Service Fill

### Practice and tested in aggregates with filling

Chrysler MS-13340; MB 229.71, Opel/Vauxhall (ex GM Europa) OV0401547 (ex Dexos2 gen 2); Honda; Nissan; Mazda; Suzuki; Toyota Herstellervorschriften beachten.

# **Characteristic**

RAVENOL EFS EcoFullSynth. 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 soot absorption and dispersion.
- Neutral towards sealing materials.

Characteristics	Unit	Data	Audit
Density at 20°C	kg/m³	842	EN ISO 12185
Colour		brown	visual
Viscosity at 100°C	mm²/s	9,2	DIN 51 562
Viscosity at 40°C	mm²/s	49,4	DIN 51 562
Viscosity index VI		171	DIN ISO 2909
HTHS at 150°C	mP?*s	2,73	ASTM D5481
CCS Viscosity at -35°C	mPa*s	4220	ASTM D5293
Low Temp. Pumping viscosity (MRV) at	mPa*s	13.350	ASTM D 4684
-40°C			
Pourpoint	°C	-63	DIN ISO 3016
Noack Volatility	% M/M	9,1	ASTM D5800/b
Flash point	°C	234	DIN ISO 2592
TBN	mg KOH/g	7,7	ASTM D2896
Sulphated ash	%wt.	0,71	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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