

## - Certificate / Product Information -



## **RAVENOL VST SAE 5W-40**

RAVENOL VollSynth Turbo VST SAE 5W-40 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.

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 VollSynth Turbo VST SAE 5W-40 utilizes the positive properties of tungsten to smooth the surface structure of the motor, reducing friction and wear, and significantly improving mechanical efficiency.

RAVENOL VollSynth Turbo VST SAE 5W-40 minimizes friction, wear and fuel consumption with excellent cold start characteristics.

RAVENOL VollSynth Turbo VST SAE 5W-40 guarantees operational safety concerning all driving conditions as for example regarding extreme stop and go traffic as well as high speed drives on motorways.

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

# **Application Notes**

RAVENOL VollSynth Turbo VST SAE 5W-40 is suitable for the energy saving operation all the year of all modern cars with petrol and diesel engines in passenger cars, vans, small transporters and similar vehicles and was specially developed for turbo chargers as well as the catalytic operation.

#### **Specifications**

API SN/CF, ACEA A3/B4

### **Approvals**

MB-Approval 229.5, Porsche A40, VW 502 00 / 505 00, BMW Longlife-01, Renault RN0700, Renault RN0710

#### Practice and tested in aggregates with filling

MB 229.3, MB 226.5, Opel GM-LL-B-025, Fiat 9.55535-Z2, Chrysler MS-12991 (replaces references to MS-10896), MS-10850, MS-10725 (Fiat 9.55535-GH2 and Fiat 9.55535-Z2), PSA B71 2296

## **Characteristic**

RAVENOL VollSynth Turbo VST SAE 5W-40 offers:

- High abrasion resistance
- Fuel saving because of easy running characteristics
- Excellent detergent and dispersant characteristics
- Prevention of black sludge creation
- Long endurance because of high oxidation stability
- Excellent cold start performance
- Very good viscosity temperature behaviour
- Low evaporation
- Suitable for catalysts

Characteristics	Unit	Data	Audit	
Density at 20°C	kg/m³	848,0	EN ISO 12185	
Colour		brown	visual	
Viscosity at 100°C	mm²/s	14,3	DIN 51 562	
Viscosity at 40°C	mm²/s	85,1	DIN 51 562	
Viscosity index VI		175	DIN ISO 2909	
HTHS at 150°C	mP?*s	3,9	ASTM D5481	
CCS Viscosity at -30°C	mPa*s	4700	ASTM D5293	
Low Temp. Pumping viscosity (MRV) at	mPa*s	13.900	ASTM D4684	
-35°C				
Pourpoint	°C	-51	DIN ISO 3016	
Noack Volatility	% M/M	7,4	ASTM D5800/b	
Flash point	°C	236	DIN ISO 2592	
TBN	mg KOH/g	10,5	ASTM D2896	
Sulphated ash	%wt.	1.05	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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