PRODUCT INFORMATION

Havoline
Drive smarter

HAVOLINE SYNTHETIC 5W-40

Havoline Synthetic 5W-40 is a highly shear stable, multigrade passenger car engine oil of the highest possible performance. **Havoline Synthetic 5W-40** has been formulated from all-synthetic base oils and advanced additive technology to meet or exceed the most demanding passenger car engine lubrication requirements. **Havoline Synthetic 5W-40** is developed to provide the ultimate in lubrication and protection, for the driver who demands maximum performance from his vehicle, day after day, whether he drives a fast hatch back, luxury saloon or high performance sports car.

Havoline Synthetic 5W-40 is certified against the highest ACEA Sequences for service-fill oils for gasoline and light duty diesel engines. As further proof of top quality **Havoline Synthetic 5W-40** is also fully API SJ/CF licensed and hence is carrying the API Service Symbol (DONUT).

Havoline Synthetic 5W-40 is the high performing product for high performance engines.

Benefits

Havoline Synthetic 5W-40 has been developed to provide maximum service for engines of today and tomorrow. It provides stable viscosity control for long duration engine performance and cleanliness from the highest temperature conditions of Southern Europe to the coldest arctic Scandinavian regions. It assures the driver the special performance suited for the car's special engine, and the trustworthy dependability ensuring low maintenance and perfect operability for a driver who wants the best for his car.

Havoline Synthetic 5W-40 provides additional advantages, in comparison with part-synthetic, non-conventional and mineral oil products in the area of outstanding thermal stability, excellent wide range viscosity-temperature characteristics and exceptional low-temperature fluidity. **Havoline Synthetic 5W-40** has been developed to offer quality which satisfies the needs of all passenger cars present on the European roads, whether they have gasoline or diesel engines, turbo charged or naturally aspirated.

Havoline Synthetic 5W-40 shows low oil consumption tendency and is particularly recommended for modern high output engines, including those incorporating the most up to date leaner burn gasoline engine technology or equipped with catalytic exhaust systems.

Havoline Synthetic 5W-40 provides significant fuel savings by minimizing frictional losses and protects against start-up wear through exceptional low-temperature fluidity.

Havoline Synthetic 5W-40 will protect against engine failure and against engine performance deterioration, thereby reducing maintenance and repair costs.

Applications

For gasoline engines the API SJ and ACEA A3-98 performance levels offer the highest grade of protection against black sludge, wear and oil oxidation which today's lubrication technology can offer. For diesel engines the API CF and ACEA B3-98 performance levels, together with approval as diesel engine oil by European car manufacturers prove that **Havoline Synthetic 5W-40** gives all the benefits required of a high quality passenger car diesel engine oil. **Havoline Synthetic 5W-40** also provides exceptional protection in engines where oils are recommended meeting the former API SG/SH/CD and/or the former CCMC G5 or PD2 performance.

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Standards and Approvals

Havoline Synthetic 5W-40 has been developed and is proven by engine testing to surpass the following gasoline and diesel engine oil performance standards and approvals:

Certified against: **ACEA A3-98, ACEA B3-98**
Licensed as: **API SJ/CF**
Manufacturer approvals: **VW 502.00, 505.00**
Mercedes Benz 229.1
Porsche
BMW Long Life 98 Oil

Havoline Synthetic 5W-40, of course also fulfills the engine oil requirements of those manufacturers requesting ACEA or the former CCMC top level performance such as Mercedes Benz, Rover, Peugeot, Renault, Fiat, etc.

Through its API SH/CF/EC license, it also satisfies the recommendations of companies as Ford, GM Vauxhall/Opel, Toyota, Nissan, etc.

Health and Safety

Havoline Synthetic 5W-40 has been formulated to the highest safety standards and is unlikely to present any significant health and safety hazards when used properly in the recommended application, and when good standards of industrial and personal hygiene are maintained. However, should eye contact occur, flush for a minimum of 15 minutes with clean water. A comprehensive Materials Safety Data Sheet is available on request and is supplied as a matter of course to purchasers of this product.

Typical Data

Density at 15 °C, kg/l	0.85
Pour point, °C	-56
Flash point (COC), °C	236
Kinematic viscosity, mm²/s	
at 40 °C	97.3
at 100 °C	15.2
Apparent viscosity, mPa.s	
at -25 °C	3100
at -30 °C	5600
Viscosity index	165
HTHS at 150 °C, mPa.s	4.1
Pumpability at -35 °C, mPa.s	15000
NOACK volatility, %wt	6.4
Total base number, mgKOH/g	8.8
Sulphated ash, %w	1.1