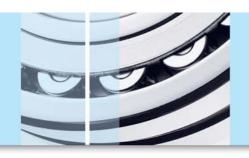


# Havoline® Fully Synthetic SAE 5W-40

# Passenger Car Motor Oil

Product Data Sheet







#### **Customer benefits**

#### Protection against Low Speed Pre Ignition (LSPI) events

Specially formulated to help protect against LSPI occurrence in turbocharged and/or newer gasoline direct-injection vehicles, which over time helps reduce engine damage.

#### Preserves and protects engines

Proven metallo-organic anti-wear additive system protects engines under all operating conditions by providing excellent wear control in even the most sophisticated valve train mechanisms, including those with variable valve timing. Low viscosity, multigrade, formulation provides additional protection reduces internal engine friction. Enhanced corrosion protection ensures compatibility with gasoline/ethanol blended fuels up to and including E85.

#### Maintains high power and performance

Works immediately upon contact with an engine's moving parts to create a protective coating that shields the engine against the deposits that lead to loss of performance. Provides excellent control of piston and ring deposits under high temperature conditions. Special friction modifiers assist in reducing internal engine friction for maximum fuel economy.

## Saves on maintenance costs

High thermal stability and excellent oxidation resistance provides outstanding protection against in-service oil degradation that contributes to filter blocking and sludge formation in the oil galleries, crankcase and valve train.

#### Reduces fuel consumption

Specifically tailored viscosity characteristics and effective friction modifier minimize internal engine frictional losses.

#### Lower oil consumption

Low volatility, hydro-cracked base oil minimizes oil lose through evaporation.

#### **Product features**

- Havoline® Fully Synthetic SAE 5W-40 is a multi-grade gasoline engine oil for use in passenger car and light truck engines requiring low viscosity, ACEA A3/B4 specifications, and strigent OEM requirements for engine protection and performance under severe driving conditions.
- Havoline® Fully Synthetic SAE 5W-40 is an advanced detergent formula viscosity control to maintain engine power and preserve fuel economy.
- Havoline® with Deposit Shield™ is formulated with 100% synthetic base stocks, in combination with advanced additives and VI improvers to provide durable, long life engine protection.
- Havoline® with Deposit
  Shield™ is formulated with
  Deposit Shield™ to provide
  outstanding thermal and shear
  stability protection for cleaner,
  smoother-running engines.









continued

## **Applications**

- Specially designed for high performance gasoline and diesel engines in passenger cars, in particular those of European designs.
- Suitable for use in naturally aspirated and turbocharged diesel in passenger cars and light trucks where ACEA A3/B4 is required.
- Naturally aspirated, turbocharged gasoline engines in passenger cars where API SP or earlier API "S" performance categories are specified.
- Light truck gasoline engines where API SP or earlier API "S" performance categories are specified.

### **Performance standards**

#### **Approvals**

- VW 502 00 / 505 00
- RN 0700 / 0710
- MB Approval 229.3
- API SP (Licensed)

#### Meet the requirements of

ACEA A3/B4







continued

# Typical test data

HAVOLINE® FULLY SYNTHETIC	RESULTS
SAE Grade	5W-40
Product Code	502900
Base No. D2896, mg KOH/g	10.8
Phosphorus, m %	0.11
Sulfated Ash, m %	1.3
Viscosity, mm²/s @ 100°C	14.4
Viscosity Index	170
Zinc, m%	0.122

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by Chevron Global Lubricants: Africa, Middle East and Pakistan

Environment, Health and Safety Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltexoils.com.