**Product Data Sheet** 







### **Customer benefits**

#### Long engine life

Proven metallo-organic anti-wear additive system helps protect engines under severe operating conditions by providing excellent wear control in even the most sophisticated valve train mechanisms, including those with variable valve timing. Low viscosity and multigrade formulation helps reduce internal engine friction.

## 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. Works to improve control of LSPI (Low Speed Pre-Ignition) events which helps to protect turbocharged gasoline direct injection engines.

#### Saves on maintenance costs

High thermal stability and excellent oxidation and nitration resistance provides outstanding protection against in-service oil degradation in both gasoline and gas fuelled engines 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 helps to minimize internal engine frictional losses.

#### Low oil consumption

Low volatility, hydro-cracked base oil helps to minimize oil loss through evaporation.

#### **Product features:**

- Havoline® Formula
  is a resource conserving,
  multigrade gasoline engine oil
  for use in passenger car and
  light truck engines requiring
  low viscosity, ILSAC GF-5,
  API SN with API SN Plus
  performance lubricants under
  severe operating conditions.
- Havoline® with Deposit Shield™ is an advanced detergent formula that helps prevent deposit build up for improved oil stability and increased engine durability.
- Havoline® with Deposit Shield™ provides excellent viscosity control that helps maintain engine power and preserve fuel economy.







# **Applications**

- Naturally aspirated and turbocharged gasoline engines in passenger cars and light commercial vehicles
- Naturally aspirated and turbocharged spark ignition engines fueled with CNG, LPG or fitted with gas/gasoline dual fuel systems in passenger cars and light commercial vehicles
- Light truck gasoline engines
- Four-stroke gasoline engines in portable power equipment where the manufacturer recommends conventional passenger car motor oils

Not recommended for use in diesel engines or motorcycle engines.







# Typical key properties

| HAVOLINE® FORMULA                           |              |
|---|--------------|
| SAE Grade                                   | 10W-30       |
| Product Code                                | 500007       |
| Base No.,<br>D2896, mg KOH/g                | 7.5          |
| Phosphorus, m%                              | 0.07         |
| Sulfur, m %                                 | 0.2          |
| Viscosity,<br>mm²/s @ 40°C<br>mm²/s @ 100°C | 70.9<br>10.4 |
| Viscosity Index                             | 133          |
| Zinc, m %                                   | 0.08         |

Minor variations in product typical test data are to be expected in normal manufacturing.

2205

## Performance standards

- API SN with SN Plus and Resource Conserving
- ILSAC GF-5

# 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.caltex.com.

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** 

Asia Pacific