



Havoline® Fully Synthetic Hybrid SAE 0W-20

Passenger Car Motor Oil

Product Data Sheet

Customer benefits

Excellent Hybrid Engine Protection

Exceptional corrosion resistance and good anti-rust ability to protect engine under extreme conditions of water contamination. The low viscosity, multigrade, formulation provides additional protection by reducing internal engine friction, and by ensuring smooth oil flow during frequent start/stop for maximum efficiency and engine protection.

Maintains Optimal Hybrid Power and Performance with Smoother Oil Flow

Strong emulsion-forming technology enables smooth oil flow even in the presence of fuel and water contamination. It works immediately upon contact with an engine's moving parts to create a protective coating that shields the engine against the deposits which lead to loss of performance.

Specifically-Formulated for Hybrids

Excellent control of sludge formation to keep engine clean under low operating temperature conditions for short-running engine in hybrids. 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

Improved viscometric properties and effective friction modifiers minimizing internal engine friction losses.

Extended drain intervals

High thermal stability and excellent oxidation resistance prevent oil degradation and extend intervals between oil changes.

Low oil consumption

Low volatility, synthetic base oil minimizes oil loss through evaporation.

Applications

Havoline Fully Synthetic Hybrid SAE 0W-20 is suitable for use in hybrid and gasoline vehicles where an API SP or ILSAC GF-6A SAE 0W-20 lubricant is recommended.

Product features:

- **Havoline Fully Synthetic Hybrid** is specifically formulated for Hybrid car engine applications to give hybrid vehicles the extra care they require. It is a resource conserving, multigrade gasoline engine oil formulated with synthetic base oils and advanced additive technologies. It is designed for hybrid electric vehicles (HEV) and plug-in hybrid electric Vehicles (PHEV) fitted with internal combustion engines, turbocharged or naturally aspirated, direct or indirect injection, requiring low viscosity ILSAC GF-6A or API SP performance lubricants where multiple stops and starts of the gasoline engine occur during the different operating phases of the hybrid vehicle.

Typical key properties

HAVOLINE® FULLY SYNTHETIC HYBRID		
SAE Grade		0W-20
Product Code		500166
Density at 15°C kg/l	ASTM D4052	0.8472
Kinematic Viscosity, mm ² /s @ 40°C	ASTM D445	43.5
mm ² /s @ 100°C	ASTM D445	8.4
Viscosity Index	ASTM D2270	172
Pour Point °C	ASTM D5950	-45
Flash Point °C	ASTM D92	242
Phosphorus mass %	ASTM D4951	0.066
Ash, sulphated mass %	ASTM D874	0.77
Zinc, mass %	ASTM D4951	0.076

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

2208

Performance standards

- API SP/Resource Conserving
- ILSAC GF-6A

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