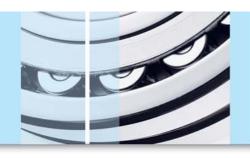


## Havoline® ProDS Fully Synthetic ECO SAE OW-20

Passenger Car Motor Oil

**Product Data Sheet** 







### **Customer benefits**

Havoline ProDS Fully Synthetic ECO SAE 0W-20 with Deposit Shield Technology uses the latest fully synthetic base oils and advanced additives technologies including special antioxidants and friction modifiers to provide outstanding protection and performance. It exhibits outstanding protection against heat, pressure, corrosion, and wear while providing excellent oxidation protection and volatility control, and superior cold temperature performance over partial synthetic and mineral motor oils. It meets or exceeds the requirements of API SP Resource Conserving and ILSAC GF-6 and most demanding automaker standards.

- Provide advanced protection against sludge, varnish and deposit buildup to keep modern engines running cleaner, stronger, and for longer
- Help maximize the power of your engine while maintaining fuel efficiency and cleanliness.
- Provide outstanding protection against wear and corrosion to help preserve engines and turbocharger durability
- Provide outstanding mitigation against Low Speed Pre-Ignition (LSPI) in turbocharged gasoline direct injection (GDI) engines to protect critical engine parts
- Exceptional turbocharger cleanliness protection
- Reduced evaporative oil loss at high temperature compared to conventional and part synthetic motor oils
- Excellent degradation control for long automaker-recommended oil change intervals

**SAE 0W-20** is licensed under the dexos1 Gen 3 specification (License no. D335BDDC089). It is recommended for use in FCA, Ford, GM, Honda, Mazda, Mitsubishi, Nissan and Toyota engines for either SAE 0W-20 or SAE 5W-20 applications. It can increase engine efficiency and improve fuel economy and provides excellent engine protection in applications recommending SAE 0W-20 or 5W-20 motor oils.

### **Product features:**

 Havoline ProDS Fully **Synthetic ECO SAE 0W-20** is premium fully synthetic lower ash motor oil with Deposit Shield Technology, a proprietary cleaning booster, designed to provide advanced protection that prolongs the peak performance and efficiency of high performance engines, particularly under harsh stopand-go driving conditions, extreme temperatures and heavy loads. It provides outstanding protection for vehicles with direct-injection and turbochargers and those that require a full synthetic motor oil.







## **Applications**

Havoline ProDS Fully Synthetic ECO SAE 0W-20 with Deposit Shield technology is recommended for use in:

- Advanced, high power density and performance engines with turbochargers, gasoline direct injection,
- Vehicles operating in extreme hot or cold or stop-and-go driving conditions
- Passenger cars, pickup trucks, SUVs and working vans in new and older vehicles
- FCA, Ford, GM, Honda, Mazda, Nissan and Toyota engines for either SAE 0W-20 or SAE 5W-20 applications







## Typical key properties

HAVOLINE® ProDS FULLY SYNTHETIC ECO			
SAE Grade		0W-20	
Product Code		500292	
Density at 15°C kg/l	ASTM D4052	0.8427	
Kinematic viscosity mm²/s @ 40°C mm²/s @ 100°C	ASTM D445 ASTM D445	44.1 8.4	
Viscosity Index	ASTM D2270	170	
Pour Point °C	ASTM D5950	-45	
Flash Point °C	ASTM D92	233	
Phosphorus mass %	ASTM D4951	0.066	
Ash, sulphated mass %	ASTM D874	0.76	
Zinc, mass %	ASTM D4951	0.076	

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

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#### Performance standards

- Outstanding turbocharger cleanliness protection<sup>1</sup>
- Preserves fuel economy up to 33% better than GM's tough dexos1
  Gen3 standards<sup>2</sup>
- Reduces piston deposits
- Good sludge control up to 7% better than GF-6 limits<sup>3</sup>
- · Meets or exceeds GM's tough dexos1 Gen3 standards
- Excellent control in fighting temperature-related oil breakdown and oil thickening up to 100% better than GF-6 limits<sup>4</sup>
- Reduces friction-related wear of critical engine parts up to 37% better than industry GF-6 limits<sup>5</sup>
- Superior corrosive wear protection of key engine parts up to 74% better than GF-6 limits<sup>6</sup>
  - 1. Based on GMTC turbocharge test using SAE 5W-30
  - 2. Based on GMVFE fuel economy test
  - 3. Based on Sequence VH sludge and varnish test
  - 4. Based on Sequence IIIH deposit test using SAE 5W-30
  - 5. Based on Sequence IVB valvetrain wear test
  - 6. Based on Sequence VIII corrosion test

Havoline ProDS Fully Synthetic ECO SAE 0W-20 is licensed under the dexos1 Gen 3 specification (License no. D335BDDC089), and meets or exceeds the following OEM specifications and industry standards:

•	API SP/ Resource Conserving	Licensed
•	ILSAC GF-6A	Licensed
•	GM dexos1 Gen 3	Licensed
•	Ford WSS-M2C962-A11	Meets
•	GM 6094M	Meets
•	Fiat 9.55535 CR-1	Meets
•	Chrysler MS-6395	Meets

<sup>&</sup>lt;sup>1</sup> Compatible with Ford WSS-M2C947-A1/B1

# 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.

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