

HAVOLINE® PRO-RS[™] RENEWABLE FULL SYNTHETIC MOTOR OIL SAE 0W-16, 0W-20, 5W-20, 5W-30

PRODUCT DESCRIPTION

Havoline[®] PRO-RS[™] Renewable Full Synthetic Motor Oil is a top-tier, renewable full synthetic motor oil derived from feedstock that includes 25% sustainably sourced plant-based oils. This product has all the performance benefits of a premium full synthetic motor oil¹, including excellent cleaning power and wear protection, but also provides environmental benefits like outstanding fuel economy, emission control², lower carbon³ and is a USDA Certified Biobased Product.

Havoline PRO-RS is designed with a proprietary cleaning booster to provide ultimate protection, especially under harsh stop-and-go driving conditions, extreme temperatures, and heavy loads. Havoline PRO-RS exceeds the latest and most demanding industry and automaker standards - 100% full synthetic performance without compromise.

FEATURES/BENEFITS

Havoline PRO-RS Renewable Full Synthetic Motor Oils are better for your car, better for the environment, and deliver:

- Lower carbon intensity has up to 37% lower carbon intensity than corresponding Havoline[®] PRO-DS[®] viscosity grade⁴
- The purity of plants is made with 25% sustainably sourced plant-based oils
- Proprietary ECOSTRENGTH™ Technology process - uses Chevron's proprietary next generation ECOSTRENGTH Technology, an innovative process to develop high-performance synthetic lubricants, utilizing renewable plant-based feedstocks with pure hydrocarbon molecules that may not have any of the impurities found in traditional base oils derived from crude petroleum
- Peace of mind Havoline PRO-RS is a USDA
 Certified Biobased Product and exceeds the latest rigorous industry and automaker standards, including ILSAC GF-6 / API SP and GM's dexos1™
 Gen 3 specification (SAE 0W-20 and 5W-30)
- Superior fuel economy retention helps maintain the oil's original fuel economy benefit at least 30% longer than typical full synthetic motor oils to help save on fuel costs⁵

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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Equivalent performance to other full synthetic motor oils.

² Based on unsurpassed Sequence IIIHB result on PRO-RS 0W-30.

³ Lower carbon intensity on a lifecycle basis compared to PRO-DS SAE 0W-20 viscosity grade; lifecycle analysis based only on cradle-to-gate analysis and doesn't include carbon intensity for end-of-life or any in-use aspects of the lifecycle analysis.

⁴ Lower carbon intensity on a lifecycle basis compared to PRO-DS SAE 0W-20 viscosity grade; lifecycle analysis based only on cradle-to-gate analysis and doesn't include carbon intensity for end-of-life or any in-use aspects of the lifecycle analysis.

⁵ Based on Modified Sequence VIF Fuel Economy Retention Test @ 340 hours using SAE 0W-16; compared against Havoline PRO-DS SAE 0W-16

- Excellent thermal protection helps maintain oils' original viscosity for longer, providing protection against oil breakdown and helping to keep engines running stronger, and for longer⁶
- Enhanced engine performance improved stability and lower volatility oil help reduce evaporative loss while in service, maintains oil performance for longer, and helps reduce oil consumption, which leads to less oil top off⁷
- Environmental benefits excellent fuel economy retention, outstanding emission control, lower carbon, and Havoline[®] PRO-RS[™] is a USDA Certified Biobased Product.

PERFORMANCE CLAIMS

- Engine performance Extreme stress tests show Havoline PRO-RS keeps engines running efficiently up to 1.3 times longer than corresponding full synthetic motor oil¹
- Lower Oil Volatility Up to 19% lower volatility than corresponding full synthetic motor oil²
- Turbocharger protection Excellent turbocharger efficiency and protection helps extended the life of the turbocharger³
- Sludge control and protection best performing sludge control in the Havoline PCMO portfolio⁴ meets the most rigorous next generation OEM requirements⁵ and provides protection to help keep engines running cleaner and longer.
- Direct injection engine protection Helps provide protection for critical engine parts against Low Speed Pre-Ignition (LSPI) in turbocharged direct injection engines
- · Piston deposit reduction
 - Based on Modified Sequence VIF Fuel Economy Retention Test using SAE 0W-16; compared against Havoline PRO-DS SAE 0W-16
 - Based on Noack Volatility performance test using SAE 5W-20; compared against Havoline PRO-DS SAE 5W-20
 - Based on GMTC turbocharge test using SAE 5W-30 (Turbo Coolant Temperature Increase after 1800 Cycles (%))
 - Based on M271SL Sludge Test using SAE 5W-30; compared against Havoline PRO-DS SAE 5W-30
 - Based on Sequence VH Sludge & Deposit Test using SAE 0W-20 and SAE 5W-30 viscosity grades

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⁶ Based on PVIS % (Percent Viscosity Increase) in the GM Oxidation & Deposits Test (GMOD) comparing Havoline PRO-RS 0W-20 and Havoline PRO-RS 5W-30 against Havoline PRO-DS 0W-20 and Havoline PRO-DS 5W-30

⁷ As demonstrated in less oil consumption in GMOD test when Havoline PRO-RS 0W-20 and Havoline PRO-RS 5W-30 is compared to Havoline PRO-DS 0W-20 and Havoline PRO-DS 5W-30. As demonstrated in better Noack under ASTM D5800 test when compared to Havoline PRO-DS Full Synthetic SAE 5W-20

APPLICATIONS, APPROVALS AND SPECIFICATIONS

Havoline[®] PRO-RS[™] Renewable Full Synthetic Motor Oils provide outstanding protection, especially for hybrids, vehicles with direct-injection and turbochargers and those that require a full synthetic motor oil. Recommended for vehicles operating under harsh stop-and-go driving conditions, extreme temperatures, and heavy loads. For use in most domestic and import passenger cars, SUVs, pickup trucks and vans.

Meets or exceeds the following industry and OEM standards:

SAE Grade	0W-16	0W-20	5W-20	5W-30
API SP/SN Plus/Resource Conserving	Х	Х	Х	Х
ILSAC GF-6A		X	Х	X
ILSAC GF-6B	X			
Acura/Honda HTO-06				X
Chrysler MS-6395		X	Х	X
Fiat 9.55535-CR-1		X	Х	X
Ford WSS-M2C960-A1 ¹			Х	
Ford WSS-M2C961-A1 ²				X
Ford WSS-M2C962-A1 ³		X		
GM dexos1 Generation 3		License # D335BMDI089		License # D335ALDI089
GM 6094M			Х	X
GM 4718M				X
USDA BioPreferred ^{®4} Certification	Х	Х	Х	X

¹ Compatible with Ford WSS-M2C945-A1/B1

² Compatible with Ford WSS-M2C946-A1/B1

³ Compatible with Ford WSS-M2C947-A1/B1

⁴ BioPreferred is a trademark owned by the $\ensuremath{\mathsf{USDA}}$

TYPICAL TEST DATA

SAE Grade	Test Method	0W-16	0W-20	5W-20	5W-30
Product Number		223520	223521	223522	223523
SDS/MSDS Number		55582	55585	53889	55592
Density at 15°C, kg/L	ASTM D4052	0.8450	0.8434	0.8470	0.8473
Viscosity, Kinematic mm ² /s at 40°C mm ² /s at 100°C	ASTM D445 ASTM D445	37.6 7.3	43.2 8.2	44.9 8.2	61.1 10.8
Viscosity, Cold Crank (CCS) (cP), CCS @ °C	ASTM D5293	-35/4300	-35/5000	-30/3760	-35/3700
Viscosity Index	ASTM D2270	163	168	159	170
Flash Point, °C(°F)	ASTM D92	234(453)	226(439)	246(475)	230(446)
Phosphorus, mass%	ASTM D4951	0.077	0.077	0.077	0.077
Ash, sulphated, mass%	ASTM D874	0.9	0.9	0.9	0.9
Zinc, mass%	ASTM D4951	0.089	0.089	0.089	0.089

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

To find the right Chevron Havoline product for your vehicles, please consult www.Havoline.com to find the right motor oil using our Product Selector tool.