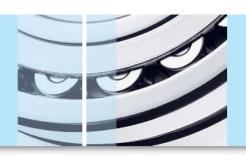
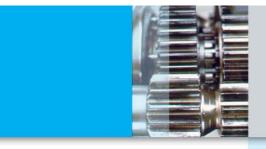
Product Data Sheet







Product description

Havoline Energy MS 5W-30 is a high performance synthetic mid sulphated ash, phosphorus and sulphur - mid-SAPS - engine lubricant designed to offer improved fuel economy performance and reduced exhaust emissions.

Havoline Energy MS 5W-30 is formulated for use in gasoline and diesel passenger cars and light duty diesel vans. It is designed to contribute to extended diesel particulate filter (DPF) and three-way catalytic convertor (TWC) aftertreatment system service life and efficiency, without compromising engine durability and performance.

Customer benefits

- High performance fully synthetic mid-SAPS technology helps improve fuel economy, emissions reduction and running costs
- Advanced technology design contributes to extended aftertreatment system lifetime without compromising engine durability
- Mid-SAPS formulation helps reduce deposit formation in DPFs offering increased uptime
- Promotes extended service life in TWCs and other gasoline engine aftertreatment systems helping reduce maintenance costs
- Offers stable, consistent and improved fuel economy performance throughout lubricant extended service life

Applications

- Havoline Energy MS 5W-30 is recommended for use as a catalyst compatible
 oil in high performance gasoline and diesel passenger cars and light duty diesel
 vans equipped with DPFs and TWCs that require low friction, low viscosity,
 mid-SAPS oils. This oil offers increased DPF and TWC life and helps maintain
 vehicle fuel economy
- This engine oil can also be used where an SAE 5W-30 grade ACEA A5/B5 or ACEA A1/B1 engine oil is specified

Product highlights:

- Fully synthetic mid-SAPS lubrication technology
- Extended aftertreatment system lifetime
- Reduced DPF deposit formation
- Extended TWC service life
- Improved fuel economy performance
- Selected specification standards include:
- ACEA
- API
- Iveco
- PSA
- Renault











- Havoline Energy MS 5W-30 can be used in PSA and Renault cars equipped with engines that require PSA B71-2290 and Renault RN 0700 specifications, respectively
- Havoline Energy MS 5W-30 is suitable for use in engines that require engine oils that meet the Iveco 18-1811 specification.

Caution: Havoline Energy MS 5W-30 is a low viscosity, mid-SAPS product and may not be suitable for use in certain engines that require high viscosity grade oils or in markets with a high fuel sulphur content.

Approvals, performance and recommendations

Performance

• ACEA C2

A1/B1

A5/B5

• API SM

CF

PSA B71-2290Renault RN 0700

Recommendations

• Iveco 18-1811







continued

Typical test data

HAVOLINE ENERGY MS 5W-30		
TEST	TEST METHODS	RESULTS
Viscosity Grade		5W-30
Product Code		01735.2
Density, 15 °C, kg/l	ASTM D4052	0.851
Kinematic viscosity, 40 °C, mm²/s	ASTM D445	60.0
Kinematic viscosity, 100 °C, mm²/s	ASTM D445	10.2
Viscosity Index	ASTM D2270	162
Pour Point, °C	ASTM D97	-39
Flash Point COC, °C	ASTM D92	228

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

<u>Disclaimer</u> Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

<u>Health, safety, storage and environmental</u> Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

For more information, go to www.chevronlubricants.com