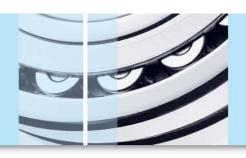
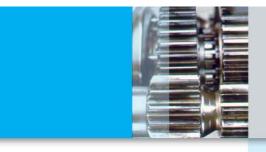


Havoline® Energy

Synthetic, Energy Conserving Passenger Car Motor Oil

Product Data Sheet







Customer benefits

Superior fuel economy

Synergistic combination of synthetic base fluids, oil soluble friction modifiers and a selected detergent/inhibitor system achieves very low friction coefficients. Viscosity characteristics are carefully chosen to minimize fluid frictional losses while providing adequate oil film thickness under all operating temperatures.

· Long engine life

Metallic detergent and ashless dispersant additive system helps prevent engine failure, even under severe operating conditions, by providing superior control of ring belt and piston skirt deposits. Excellent low temperature viscosity characteristics ensure that vital engine components are lubricated quickly at start-up, even at very low temperatures.

· Reduced maintenance costs

Proven thermal stability and oxidation resistance minimizes in-service oil degradation which contributes to filter blocking and sludge formation in the oil galleries, crankcase and valve train.

· Low oil consumption

Very high viscosity index synthetic base oils control oil flow through the ring belt area by maintaining oil viscosity, and reduce oil evaporation at the elevated piston temperatures experienced under even very severe operating conditions.

Applications

- Naturally aspirated and turbocharged gasoline and diesel engines in modern passenger cars and light commercial vehicles
- Particularly suitable for use in engines where oils meeting Ford specifications WSS-M2C913-C, -M2C913-B and -M2C913A are specified.

Not recommended for use in CNG or LPG-fuelled engines, or in motorcycle engines.

Product features:

Premium performance, friction modified multigrade motor oil formulated from high performance synthetic base oils and unique additive technology for use in modern passenger car and light truck gasoline and diesel engines where oils of performance up to and including ACEA A1/B1 and A5/B5 are recommended. It is optimized to provide unsurpassed engine protection and fuel economy.











Performance standards

- ACEA A1/B1, A5/B5
- API SL (licensed)
- Ford WSS-M2C913-C (approved)

Product specifications

HAVOLINE ENERGY	
KEY PROPERTIES	RESULTS
SAE Grade	5W-30
Phosphorus, m %	0.10
Sulfated Ash, m %	1.10
Viscosity,	
mm²/s @ 40°C	51.0
mm²/s @ 100°C	9.5
Viscosity Index	174
Zinc, m %	0.11

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 Lubricants; Africa, Middle East and Pakistan.

<u>Environment, Health and Safety</u> 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.caltexoils.com.