



Havoline Fully Synthetic C3 SAE 5W-30

Synthetic Passenger Car Motor Oil

Product Data Sheet

Customer benefits

Maximum engine life

Wider temperature range capability of the synthetic base fluid ensures correct oil viscosity to reduce friction at start-up, and to provide maximum lubricity during high temperature operation. The effective anti-wear additive system minimizes wear in even the most sophisticated valve train mechanisms, including those with variable valve timing.

Maximum power and performance

Metallic detergent and ashless dispersant additive system ensures maximum power and performance by providing superior control of ring belt and piston skirt deposits, even under the most severe operating conditions.

Reduced emissions

Formulated with latest generation technology containing reduced levels of metals, phosphorus and sulfur, it maximizes the life of sensitive catalysts in catalytic converters and reduces the plugging rate of diesel particulate filters.

Minimum maintenance costs

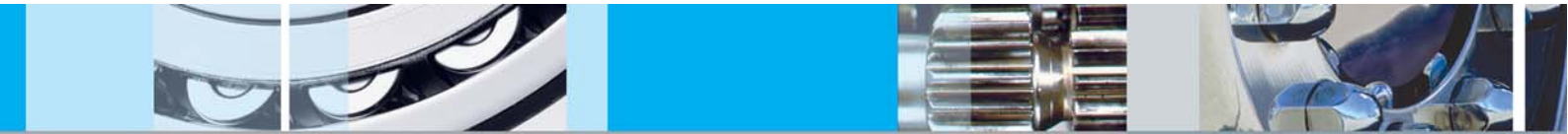
Superior thermal stability and oxidation resistance provides maximum protection against in-service oil degradation which contributes to filter blocking and sludge formation in the oil galleries, crankcase and valve train. Low metal, phosphorus and sulfur formulation extends emission system durability.

Low oil consumption

Synthetic, highly shear-stable formulation provides superior control of oil flow through the ring belt area by maintaining oil viscosity, and reduces oil evaporation at the elevated ring zone temperatures experienced under all operating conditions.

Product features:

- **Havoline® Fully Synthetic C3 SAE 5W-30** is a premium performance, multigrade motor oil formulated from selected synthetic base fluids and matching additive technology for use in passenger car and light truck gasoline and diesel engines under all operating conditions.
- **Havoline® Fully Synthetic C3 SAE 5W-30** is formulated with reduced levels of metals and the elements phosphorus and sulfur to provide maximum durability of the latest low emission vehicle technologies. It is optimized to provide complete engine protection plus ultimate performance.



Applications

- Gasoline and diesel engines in passenger cars and light duty trucks where ACEA C3, or API SN or earlier API 'S' performance categories are specified.
- Gasoline and diesel engines in passenger cars and light duty trucks where GM dexos2™, MB 229.31 or MB 229.51 performance categories are specified.
- Naturally aspirated and turbocharged gasoline and diesel engines in passenger cars and light trucks
- Low emission passenger car and light duty vehicle engines fitted with latest catalytic converter (gasoline) or diesel particulate filter technology
- Four-stroke gasoline engines in portable power equipment where the manufacturer recommends conventional passenger car motor oils

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

Typical key properties

HAVOLINE® FULLY SYNTHETIC C3	
SAE Grade	5W-30
Product Code	500207
Base No., D2896, mg KOH/g	8.0
Phosphorus, m %	0.08
Sulfated Ash, m %	0.8
Zinc, m %	0.09
Viscosity, mm ² /s @ 100°C	11.8

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

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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.

Performance standards

- API SN (licensed)
- ACEA C3
- Mercedes-Benz MB-Approval 229.51
- GM dexos2™ licensed
(License Number GB2C1203089)
- Suitable for use in ACEA C2* engines

* Please note that user will not receive fuel economy benefits

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