

PRODUCT DATA SHEET



Marathon Endurance[®] Synthetic Blend Motor Oils

Product Description

Marathon Endurance[®] Synthetic Blend Motor Oil is a premium quality passenger car motor oil (PCMO). Its advanced formulation delivers the ultimate in engine protection, delivering dependable pre-ignition control and outstanding fuel economy. This PCMO meets the latest industry requirements, including those outlined by current ILSAC GF-6 industry standards.

Marathon Endurance[®] Synthetic Blend Motor Oil offers outstanding performance on all critical standards of the GF-6 specification. Its advanced formulation fully meets warranty requirements of newer turbocharged gasoline direct-injection (TGDI) engine types. These products provide premium protection in wear, oxidation control, fuel economy and pre-ignition. They also combat engine sludge, rust, and corrosion and promote piston cleanliness for all engine types, subjected to severe service or low-temperature operation.

Features

- ✓ Reduces risk of timing wear in modern TGDI engines
- ✓ Improved pre-ignition protection that exceeds current API SN PLUS products
- ✓ Protects emissions control system catalysts
- ✓ Excellent fuel economy
- ✓ Optimal low-temperature pumpability for cold start protection
- ✓ Combats varnish and sludge to keep engines clean by minimizing deposit formation

Industry and OEM Applications

- API SP, SN Plus
- Resource Conserving, ILSAC GF-6¹
- Fully backwards compatible API SN, SM, SL, SJ
- FORD WSS-M2C960-A1 (5W-20)²
- FORD WSS-M2C961-A1 (5W-30)²
- CHRYSLER MS-6395S
- Toyota, Honda, Nissan, and Hyundai³

PRODUCT DATA SHEET



Marathon Endurance[®] Synthetic Blend Motor Oils

Applications⁴:

Domestic and imported vehicles with turbocharged gasoline direct-injection (TGDI), conventional gasoline-fueled and flex-fuel passenger cars, light trucks, and sport utility vehicles, including gasoline-electric hybrids, especially when operating under severe conditions or anywhere the manufacturer calls for ILSAC GF-6 or API SP-rated oils for engine application.

Technical Data (Typical values)



SAE Grade		5W-20	5W-30	10W-30	10W-40	20W-50
Resource Conserving, ILSAC GF-6A		Yes	Yes	Yes	No	No
Viscosity @ 100°C, cSt	D445	8.646	10.53	10.55	15	18.28
Viscosity @ 40°C, cSt	D445	53.05	65.57	63.98	99.63	149.5
Viscosity Index	D2770	140	149	154	158	137
Specific Gravity at 60°F	D4052	0.8586	0.8576	0.8597	0.8616	0.8704
Pour Point, °C	D5950	-45	-45	-45	-42	-33
Flash Point, °C	D92	202	202	203	205	205
Color ASTM	D1500	L3.0	L3.0	L3.0	L3.0	L3.0
CCS, cP	D5293	6300 (-30°C)	6400 (-30°C)	4000 (-25°C)	5700 (-25°C)	4300 (-15°C)
Noack Volatility, %w	D5800	11.7	11.2	11.4	9.8	6.5
TBN	D2896	7.1	7	7	7.1	7.1

- (1) ILSAC viscosity grades
- (2) Backwards compatible with Ford WSS-M2C945-B1 (5W-20)/ M2C946-B1 (5W-30) and GM6094M/GM4718M (obsolete)
- (3) Require ILSAC GF-6 approved oils for service fill. Additional unpublished specifications for factory fill and genuine oils (mostly 0W-20)
- (4) Always follow operator's manual for recommended viscosity grade and API service classification Certification Mark "Starburst" and the Service Symbol "Donut" are API's trademarks and cannot be used without proper license

The recommended shelf life for these oils is typically 48 months from manufacturing date when stored properly in the original sealed containers.