



# Full Synthetic Motor Oil



Engine Guard® Full Synthetic is a premium quality, high detergent motor oil. Engine Guard® is specially formulated to provide a high viscosity index, utilizing a select additive package that provides outstanding protection against wear, rust, corrosion, oxidative thickening, acid formation, sludge and varnish deposits. Continuous use of Engine Guard® Full Synthetic motor oil will help increase sludge protection, minimize start-up wear, reduce oil consumption, and reduce the likelihood of low speed pre-ignition. Meet's requirements for all gasoline engines where a full synthetic motor oil carrying an API SP, SN Plus, SN, SM, SL and ILSAC GF-6A or previous classification are specified.

## Features and Benefits








- ✓ *Enhanced performance benefits at extreme temperatures compared with conventional motor oils*
- ✓ *Outstanding resistance to viscosity and thermal breakdown at high temperatures*
- ✓ *Protects against sludge and varnish formation and rust and bearing corrosion*
- ✓ *Excellent low-temperature pumpability for protection during cold starts*
- ✓ *Formulated to protect turbochargers and emission control system catalysts*
- ✓ *Formulated for use in vehicles operating on ethanol-containing fuels up to E85*
- ✓ *Reduces the occurrence of Low Speed Pre-Ignition (LSPi)*



# Industry/OEM Specifications and Licenses

## Available Package Sizes

Viscosity	 Quarts	 Bag N' Box	 Drums	 Totes	 Bulk
0W/20	✓	✓	✓	✓	*
5W/20	✓	✓	✓	✓	*
5W/30	✓	✓	✓	✓	*
10W/30	✓	✓	✓	✓	*

## EG Full Synthetic Motor Oil

## Typical Properties

Viscosity Grade	0W-20	5W-20	5W-30	10W/30
Specific Gravity @ 60°	0.847	0.848	0.851	0.852
Density, lbs/gal @ 60°	7.05	7.06	7.09	7.10
Boron, wt. %	0.02	0.02	0.02	0.02
Calcium, wt. %	0.099	0.099	0.099	0.099
Color, ASTM D1500	3.0	3.0	3.0	3.0
Flash Point (COC), °C (°F)	229 (444)	229 (444)	235 (455)	232 (450)
Magnesium, wt. %	0.059	0.059	0.059	0.059
Molybdenum, wt. %	0.0079	0.0079	0.0079	0.0079
Nitrogen, wt. %, wt. %	0.087	0.087	0.087	0.087
Pour Point, °C (°F)	-45 (-49)	-45 (-49)	-45 (-49)	-42 (-44)
Viscosity, Kinematic				
cSt @ 40°C	46.0	45.4	61.2	63.2
cSt 100°C	8.8	8.4	10.9	10.4
Viscosity Index	170	159	169	147
Cold Cranking Viscosity, cP @ (°F)	5,800 (-30)	4,430 (-30)	4,400 (-30)	3,760 (-25)
High Temp/High Shear Viscosity, cP @ 150°C	2.6	2.6	3.0	3.1
Sulfur, wt. %	0.3	0.3	0.3	0.3
Sulfated Ash, ASTM D874, wt %	0.92	0.92	0.92	0.92
Total Base Number (TBN), ASTM D2896	8.0	7.0	7.9	7.0
Phosphorus, wt %	0.077	0.077	0.077	0.077
Zinc, wt %	0.085	0.085	0.085	0.085

## Industry/OEM Approvals

Title	0W/20	5W/20	5W/30	10W/30
ILSAC GF-6A	Approved	Approved	Approved	Approved
API SP with Resource Conserving	Approved	Approved	Approved	Approved
Chrysler MS-6395	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements
GM 4718M	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements
GM6094M	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements
Ford WSS -M2C945-A (SAE 5W/20)	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements
Ford WSS -M2C946-A (SAE 5W-30)	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements
Ford WSS -M2C947-A (SAE 0W/20)	Meets Requirements	Meets Requirements	Meets Requirements	Meets Requirements

\*Check for availability.

MLP103