

CITGO SUPERGARD® SYNTHETIC
MOTOR OILS

Date 1/09

DESCRIPTION: CITGO SUPERGARD Synthetic Motor Oils are well-balanced combinations of today's highest quality synthetic base stocks and contain an advanced additive system that will meet the stringent automotive specifications. They are designed to provide excellent protection in today's high performance gasoline (including turbocharged and supercharged) engines in passenger cars, vans, sport utility vehicles, and light trucks. These synthetic engine oils demonstrate improved performance in today's advanced engine designs, and are available in SAE 5W-20, SAE 5W-30, and 10W-30 viscosity grades.

- QUALITIES:**
- Excellent low-temperature starting and pumpability characteristics
 - High-temperature/high-shear properties well above conventional oils
 - Lower volatility when compared to conventional oils
 - Excellent thermal and oxidation stability
 - Enhanced protection against varnish buildup and sludge formation in critical engine parts for top performance and long engine life
 - Extended engine life due to control of wear and deposit formation
 - Compatible with conventional and synthetic motor oils

APPLICATIONS: SUPERGARD Synthetic Motor Oils are recommended for passenger cars, sport utility vehicles and light trucks operating on gasoline. They are also recommended for use in gasoline engines which have been converted to operate on compressed natural gas (CNG), liquified natural gas (LNG), and liquified petroleum gas (LPG-which includes propane and butane). Consult the vehicle owner's manual for proper engine lubricant selection.

SUPERGARD Synthetic Motor Oils meet the performance requirements for the latest gasoline-fueled engine service ILSAC GF-4 and API SM and display the API Certification Mark and API Service Symbol. They have also demonstrated benefits in industry accepted fuel economy tests. SUPERGARD Synthetic SAE 5W-30 and 10W-30 provide excellent performance where GM6094M is referenced.

Note: CITGO SUPERGARD Synthetic Motor Oils are not recommended for use in diesel engines in passenger cars, vans or light trucks. CITGO CITGARD® Motor Oils are recommended for these applications.

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Date 1/09 - (Continued)

TYPICAL PROPERTIES:

CITGO SUPERGARD® SYNTHETIC MOTOR OILS

SAE Grade	5W-20	5W-30	10W-30
Material Code	620859001	620861001	620863001
Gravity, ASTM D 4052, °API	35.0	34.9	34.2
Pounds Per Gallon	7.08	7.08	7.11
Flash Point, ASTM D 92, °F (°C), COC	466 (242)	460 (238)	464 (240)
Low Temperature Cranking, ASTM D 5293			
Temperature, °F (°C)	-22 (-30)	-22 (-30)	-13 (-25)
Viscosity, cP	4,040	4,610	4,310
Viscosity, ASTM D 445, cSt at 40°C	47.2	61.8	66.5
cSt at 100°C	8.5	10.6	10.6
Viscosity Index, ASTM D 2270	158	162	148
Low Temperature Pumpability, ASTM D 4684			
Temperature °F (°C)	-31 (-35)	-31 (-35)	-22 (-30)
Viscosity, cP	11,700	15,700	13,200
Yield Stress, Pa	None	None	None
HTHS Rate, ASTM D 4683, Vis cP at 150 °C	2.8	3.1	3.2
Pour Point, ASTM D 97, °F (°C)	-27 (-33)	-22 (-30)	-27 (-33)
Color, ASTM D 1500	L3.0	L3.0	L3.0
ILSAC GF-4	Yes	Yes	Yes
API SM	Yes	Yes	Yes
Energy Conserving	Yes	Yes	Yes