



CITGO® SUPERGARD® Motor Oils

OVERVIEW



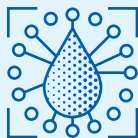
- Premium-quality engine oils designed to provide optimum performance in high-output gasoline engines (including turbocharged and supercharged) in passenger cars, vans, sport utility vehicles, and light trucks.
- The new technology incorporated in these latest-generation lubricants enables them to exceed manufacturers' performance requirements and demonstrate improved performance in today's advanced engine designs.
- Available in both single and multi-grades. Grades SAE 5W-20 and SAE 5W-30 are synthetic blends.

FEATURES & BENEFITS

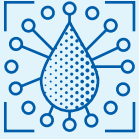


- Exceed latest SAE low-temperature pumping viscosity requirements.
- Provide improved performance in foaming control.
- Provide significantly greater engine cleanliness, wear protection, and resistance to oil thickening.
- Protect against varnish buildup and sludge formation on critical engine parts.
- Control high-temperature deposits in critical ring belt area.
- Provide maximum protection against rust and corrosion.
- Meet SAE standards for high-temperature/high-shear rate viscosity.
- Extend engine life by controlling wear and deposit formation.
- Protects today's high power density engines from Low Speed Pre-ignition (LSPI) and timing chain wear.

APPLICATIONS



- Recommended for passenger cars, sport utility vehicles, and light trucks operating on gasoline.
- Recommended for use in gasoline engines which have been converted to operate on compressed natural gas (CNG), liquefied natural gas (LNG), and liquefied petroleum gas (LPG, which includes propane and butane).

APPLICATIONS

- Service categories:

All viscosity grades are licensed for API SP and are backward compatible with prior API Service Categories (SN Plus, SM, SL, SJ and SH).

SAE 5W-20 and SAE 5W-30 are synthetic blends with API SP, Resource Conserving and ILSAC GF-6A.

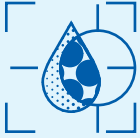
SAE 10W-30: API SP, Resource Conserving, and ILSAC GF-6A.

SAE 5W-20: Meets the performance requirements of Honda SAE 5W-20 specification.

- Refer to equipment owner's manual for proper lubricant recommendation.

Note: CITGO SUPERGARD Motor Oils are not recommended for use in diesel engines. CITGO CITGARD® Motor Oils are recommended for diesel applications.

PROPERTIES



Typical Properties for CITGO Supergard Motor Oils:

SAE Grade	5W-20	5W-30	10W-30	10W-40	20W-50	30	40
Material Code	620802001	620805001	620813001	620814001	620825001	620903001	620904001
Gravity, ASTM D4052, °API	32.3	32.9	30.6	30.7	28.8	28.7	28.0
Pounds Per Gallon	7.19	7.17	7.27	7.27	7.35	7.35	7.39
Flash Point, ASTM D92, COC, °F (°C)	439 (226)	442 (228)	450 (232)	453 (234)	473 (245)	489 (254)	500 (260)
Low Temperature Cranking, ASTM D5293							
Temperature, °F (°C)	-22 (-30)	-22 (-30)	-13 (-25)	-13 (-25)	5 (-15)	—	—
Viscosity, cP	5,970	5,200	5,770	6,000	6,120	—	—
Viscosity ASTM D445							
cSt at 40°C	49.9	59.3	70	97	163	104	148
cSt at 100°C	8.15	9.8	10.4	14.1	18.1	11.8	14.7
Viscosity Index, ASTM D2270	142	151	134	149	123	103	98
Pour Point, ASTM D97, °F (°C)	-33 (-36)	-38 (-39)	-33 (-36)	-33 (-36)	-27 (-33)	-22 (-30)	0 (-18)
Color, ASTM D1500	L3.5	L3.5	L3.5	L3.5	L3.5	L3.5	L4.0
API Service Category	SP	SP	SP	SP	SP	SP	SP
Resource Conserving	Yes	Yes	Yes	No	No	No	No
ILSAC Service category	GF-6A	GF-6A	GF-6A	N/A	N/A	N/A	N/A
Ford WSS	M2C9060-A1	M2C961-A1	N/A	N/A	N/A	N/A	N/A
Chrysler MS 6395	Yes	Yes	Yes	N/A	N/A	N/A	N/A

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