

CITGO SUPERGARD® MOTOR OILS



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DESCRIPTION: CITGO SUPERGARD Motor Oils are premium quality engine oils designed to provide optimum performance in high-output gasoline (including turbocharged and supercharged) engines in passenger cars, vans, sport utility vehicles, and light trucks. The new technology incorporated in this latest-generation lubricant enables it to exceed manufacturers' performance requirements. These engine oils demonstrate improved performance in today's advanced engine designs. SUPERGARD is available in both single and multigrades.

- QUALITIES:**
- 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.

- SERVICE CATEGORIES:**
- All viscosity grades exceed requirements for API SL, SJ and obsolete category SH.
 - SAE 5W-20 and 5W-30 – API SM; other viscosity grades – API SL.
 - SAE 5W-20 and 5W-30 – API Engine Lubrication Oil Certification Mark for ILSAC GF-4.
 - SAE 10W-30 – Meets the fuel economy requirements and performance requirements of API SL/Energy Conserving.
 - SAE 5W-20 and 5W-30 – Meet the performance requirements of Ford WSS-M2C 930-A and M2C929-A respectively.
 - SAE 5W-20 – Meets the performance requirements of Honda SAE 5W-20 specification.
 - SAE 5W-30, 5W-20 – Meets the performance requirements of General Motors GM6094M.
 - Military CID: A-A-52039 (Commercial Item Description, supercedes MIL-L-46152).

APPLICATIONS: CITGO SUPERGARD Motor Oils are recommended for passenger cars, sport utility vehicles, and light trucks operating on gasoline. SUPERGARD Motor Oils 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 5W-20 is recommended for those engines requiring an SAE 5W-20 viscosity grade.

SUPERGARD SAE 5W-20 and 5W-30 meet the performance requirements for latest gasoline-fueled engine service and display the API Certification Mark. SAE 5W-20, 5W-30, and 10W-30 have also demonstrated benefits in industry accepted fuel economy tests.

Note: SUPERGARD 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.

TYPICAL PROPERTIES:

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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 D 4052, °API	32.8	32.6	29.5	29.7	27.9	27.5	27.1
Pounds Per Gallon	7.17	7.18	7.32	7.31	7.39	7.41	7.43
Flash Point, ASTM D 92, COC, °F (°C)	421 (229)	448 (231)	448 (231)	432 (232)	473 (245)	489 (254)	500 (260)
Viscosity, ASTM D 445, cSt at 40°C	46	64	68	96	165	110	154
cSt at 100°C	8.2	10.6	10.4	13.9	18.0	12.2	15.1
ASTM D 2161, SUS at 100°F	235	325	347	493	859	576	808
SUS at 210°F	53.6	62.4	61.5	75	92	68	80
Viscosity Index, ASTM D 2270	152	157	140	148	121	100	98
Low Temperature Cranking, ASTM D 5293	-22 (-30)	-22 (-30)	-13 (-25)	-13 (-25)	+5 (-15)	—	—
Temperature, °F (°C)	5,000	6,100	5,700	5,900	7,800	—	—
Viscosity, cP							
Low-Temperature Pumping, ASTM D 4684	-31 (-35)	-31 (-35)	-22 (-30)	-22 (-30)	-4 (-20)	—	—
Temperature, °F (°C)	17,000	23,000	29,200	22,700	24,400	—	—
Viscosity, cP	None	None	None	None	None	—	—
Yield Stress, Pa	2.6	3.1	3.0	3.6	4.6	—	—
HTHS Rate, ASTM D 4683, Vis cP at 150°C	L3.0	L3.0	L2.5	L2.5	L4.0	L5.5	L6.0
Color, ASTM D 1500							
API Service Category	SM	SM	SL	SL	SL	SL	SL
API Certification Mark	Yes	Yes	No	No	No	No	No
Energy Conserving	Yes	Yes	Yes	No	No	No	No