

CITGO CITGEAR® SYNTHETIC HT  
LUBRICANTS

Date 06/14

- DESCRIPTION:** CITGO CITGEAR Synthetic HT Gear Lubricants are a complete line of fully synthetic products designed for gear applications operating at high temperatures and/or very low temperatures, severe conditions not requiring extreme pressure (EP) load protection.
- QUALITIES:** Compared to conventional mineral oil based products, CITGEAR Synthetic HT lubricants offer exceptionally low pour points and high viscosity indexes.
- High viscosity index provides higher viscosities and protective film thickness at high operating temperatures.
  - Excellent low temperature properties for easy fluid pumping and equipment start-up in extreme cold environments.
  - Highly resistant to oxidation, provides rust and corrosion protection and low foaming tendencies.
  - Lower coefficients of friction than conventional mineral oils as determined in steel on steel measurements, which provides energy savings potential.
  - Higher heat transfer properties than conventional mineral oils often results in cooler running machinery.
  - Compatible with most conventional mineral oils.
  - Compatible with essentially all elastomers, gaskets, seals such as nitrile, Buna N, Viton®, Teflon®, polyethylene, flourocarbon, polyacrylate, epoxy, and PVC. They will not deteriorate acrylic paints or lacquers.
- APPLICATIONS:** CITGO CITGEAR Synthetic HT Lubricants are recommended for bearings and gears operating under high temperatures, for applications which experience a wide range of temperatures, where energy savings are desired, and where a long lasting fluid is desired for extended drain intervals. They are particularly recommended for lubricating industrial enclosed gears, "sealed-for-life" systems, and heavily loaded plain or roller element bearings. They are recommended for splash, idler immersion systems, forced drip and mechanical spray systems. In a properly designed spray system, full coverage of the entire face of the gear teeth can be maintained.
- CITGO CITGEAR Synthetic HT Lubricants can also be used in industrial blowers such as those manufactured by GE Energy (Roots), Gardner Denver, etc.
- CITGO CITGEAR Synthetic EP Gear Lubricants are recommended for gears requiring extreme pressure protection.

Viton is a registered trademark of DuPont Dow Elastomers.  
Teflon is a registered trademark of DuPont.

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## TYPICAL PROPERTIES:

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Grade	68	100	150	220	320	460	680
Material Code	632571001	632572001	632573001	632574001	632575001	632577001	632579001
Specific Gravity	0.8465	0.8503	0.8549	0.8573	0.8588	0.8628	0.8657
API Gravity	35.6	35.0	34.0	33.6	33.2	32.5	31.9
Pounds Per Gallon	7.05	7.08	7.12	7.14	7.15	7.18	7.21
Viscosity, cSt at 40°C	61.8	91.4	161.7	229	321	460	634
Viscosity, cSt at 100°C	9.6	13.0	20.2	26.5	34.2	44.9	57.0
Viscosity Index	138	140	146	149	150	153	154
Flash Point, °F (°C)	561 (294)	550 (288)	565 (296)	554 (290)	554 (290)	540 (282)	572 (300)
Fire Point, °F (°C)	583 (306)	576 (302)	586 (308)	586 (308)	586 (308)	597 (314)	597 (314)
Pour Point °F (°C)	-71 (-57)	-65 (-54)	-54 (-48)	-49 (-45)	-44 (-42)	-44 (-42)	-33 (-36)
Copper Corr	1A	1A	1A	1A	1A	1A	1A
Rust A/B	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Demulsibility	40/40/0/15	40/40/0/15	40/40/0/10	40/40/0/15	40/40/0/15	40/40/0/10	40/40/0/15
Four Ball Wear at 40kg	0.31	0.32	0.31	0.30	0.30	0.32	0.32
at 20kg	0.21	0.21	0.21	0.20	0.23	0.22	0.24
Foam Test, Seq. I, II, III	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Color	L1.0	L1.0	L1.0	L1.0	L1.0	L1.0	L1.0
AGMA Grade	2	3	4	5	6	7	8