

CITGO CITGEAR® SYNTHETIC HT
LUBRICANTS

Date 01/06

- DESCRIPTION:** CITGO CITGEAR Synthetic HT Gear Lubricants are a complete line of products designed for gear applications operating at high temperatures and/or very low temperatures, severe conditions not requiring extreme pressure (EP) protection.
- QUALITIES:** Compared to conventional mineral oil based products, CITGEAR Synthetic HT lubricants offer exceptionally low pour points and high viscosity index. The high viscosity index provides higher viscosities and more film thickness at high temperatures and lower viscosities at low temperatures for easy start-up. They exhibit low foaming tendencies, oxidation resistance, and provide rust and corrosion protection.
- CITGO CITGEAR Synthetic HT Lubricants have lower coefficients of friction than conventional mineral oils as determined in steel on steel measurements. This characteristic means lower operating temperatures which can extend component life as well as reduce energy consumption.
- These fluids are 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 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. No flushing or cleaning is required when converting from mineral oils to these synthetic products.
- CITGO CITGEAR Synthetic HT Lubricants can also be used in industrial blowers such as those manufactured by Dresser 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.

TYPICAL PROPERTIES:

CITGO CITGEAR® SYNTHETIC HT LUBRICANTS

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
cSt at 100°C	9.6	13.0	20.2	26.5	34.2	44.9	57.0
SUS at 100°F	287	424	750	1059	1485	2129	2938
SUS at 210°F	58	70	99	127	162	210	266
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	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Seq. II	10/0	10/0	10/0	20/0	20/0	20/0	20/0
Seq. III	5/0	5/0	5/0	0/0	0/0	0/0	0/0
Color	L1.0	L1.0	L1.0	L1.0	L1.0	L1.0	L1.0
AGMA Grade	2	3	4	5	6	7	8