



CITGO® CITGEAR® HD Synthetic Gear Lubricants

OVERVIEW



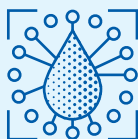
- State-of-the-art heavy duty, synthetic gear and bearing lubricants designed for use in manual transmission, transfer cases, and differentials of passenger cars, trucks, farm tractors, construction equipment, and over-the-road trucks.
- Formulated using a unique, proprietary combination of synthetic base stocks and additives to offer maximum protection for gears and bearings over a wide range of operating temperatures.

FEATURES & BENEFITS



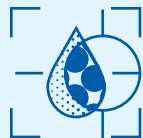
- Superior oxidation resistance for extended drain intervals.
- Excellent load-carrying properties (SAE 75W-90, 75W-140, and 80W-140) for maximum protection.
- High viscosity index and low pour point synthetic base stocks provide reduced friction, resulting in fuel economy potential during low-temperature start-ups or operating conditions.
- Excellent demulsibility, hydrolytically stable, and non-foaming.
- Shear-resistant for lasting viscosity performance.

APPLICATIONS



- **SAE 75W-90, 75W-140, and 80W-140 grades** are recommended for differentials (including limited-slip units), manual transmission for which hypoid-type lubricants are required, and transfer cases for heavy equipment: trucks, tractors, industrial gear drives, automobiles, and farm machinery.
- Meet or exceed the following performance requirements:
API Service Classification GL-5 and MT-1
- **SAE 50** grade is recommended for heavy duty service in manual transmissions for which the manufacturer normally recommends either engine oils or GL-1 to GL-4 lubricants. Contains anti-wear protection and rust, oxidation, foam, and corrosion inhibitors to protect bearings and synchronizers and to promote longer transmission life. Provides improved start-up, easier shifting, and less gear wear in low-temperature environments. Less friction, less drag, and improved oxidation resistance combine to provide fuel economy benefits and longer drain intervals.
- Recommended in applications calling for the following specifications:
API GL-4, MT-1

PROPERTIES



Typical Properties for CITGO CITGEAR HD Synthetic Gear Lubricants:

SAE Grade	75W-90	75W-140	80W-140	50
Material Code	632496001	632497001	632498001	632495001
Specific Gravity	0.865	0.869	0.867	0.857
Density, lb/gal	7.20	7.23	7.22	7.14
Viscosity, ASTM D445,				
cSt at 40°C	126	185	211	137
cSt at 100°C	16.7	25.8	25.1	17.9
Viscosity Index, ASTM D2270	144	171	150	145
Brookfield Viscosity ASTM D2983				
cP at -26°C	—	—	46,300	28,800
cP at -40°C	114,500	137,500	—	—
Pour Point ASTM D97, °F (°C)	-65 (-54)	-60 (-51)	-36 (-32)	-38 (-39)
Flash Point, ASTM D92, °F (°C)	378 (192)	370 (188)	428 (220)	507 (264)
Foam Test, ASTM D892	Pass	Pass	Pass	Pass
Copper Corrosion, ASTM D130	1A	1A	1A	1A
FZG, Failure Stage	>12	>12	>12	NA

NA = Not Applicable

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