



746 | Syn-O-Gen

EP 80W140 Gear Lubricant

DESCRIPTION:

746 Syn-O-Gen EP 80W140 is 100% pure synthetic GL-5 gear lubricant for heavy-duty extreme pressure performance in all types of gear drives and specifically for rear axles.

COMPOSITION:

746 Syn-O-Gen is compounded using a synthetic basestock which has a high viscosity index and exceptionally low pour point. This lubricant contains extreme pressure additives, as well as rust, oxidation and corrosion inhibitors to protect gears and bearings operated under a wide variety of load conditions. The high and low temperature performance of this product greatly exceeds that of conventional SAE 80W-140 and SAE 140 hypoid gear lubricants.

PERFORMANCE CHARACTERISTICS:

746 Syn-O-Gen outperforms conventional gear lubricants to promote longer gear life and better operating economy. Some of the major advantages are:

Increased gear life - 746 Syn-O-Gen's extreme pressure (EP) performance results in longer gear life by providing extremely high film strength and superior low-temperature performance. It also has anti-rust and anti-corrosion properties to further promote extended gear and bearing life. This lubricant exhibits excellent demulsibility and shear stability.

Better operating performance - As a result of the superior lubricating properties of Syn-O-Gen EP, improved fuel mileage is increased. When used in manual transmissions, sub-zero shifting is much easier.

Extended drain, all-season lubrication - With extremely low channel points and high viscosity indices, 746 Syn-O-Gen provides excellent performance over a broad temperature range. Further, since Syn-O-Gen EP resists oxidation, it will last significantly longer than conventional gear oils.

Reduced maintenance and down-time - All of the foregoing advantages of Syn-O-Gen EP translates directly into reduced maintenance and less down-time.

USES:

746 Syn-O-Gen meets and exceeds the following performance requirements:

API Classification GL-5+/MT-1 Harnischfeger (P&H) 474
Dana Axle Mack Truck GO-G/S
Eaton Axle MIL-L-2105D

General Electric D50E9C Rockwell International 0-76-E

APPLICATIONS:

746 Syn-O-Gen EP is recommended for applications where heat and wear present major problems. These applications include manual transmissions where EP type lubricants are recommended, differentials including limited slip, and transfer cases for heavy equipment, trucks, tractors and industrial gear drives. Automobiles light-duty trucks and farm machinery are other potential uses of Syn-O-Gen EP Lubricants.



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TYPICAL SPECIFICATIONS:

| Property | Product Data | Test Method |
|----------------------------------|---------------------|---------------------|
| SAE Grade | 80W-140 | J306-b |
| AGMA Grade | 5-6 EP | ASTM D-2422 |
| Viscosity, cSt | | ASTM D-445 |
| 100°C | 31.35 | |
| 40°C | 254.1 | |
| Viscosity, SUS | | ASTM D-2161 |
| 210°F | 150.6 | |
| 100°F | 1,221 | |
| Viscosity, cP | | ASTM D-2983 |
| -18°C (0°F) | 20,500 | |
| -40°C (-40°F) | 90,000 | |
| Viscosity Index | 172 | ASTM D-2270 |
| Channel Point, °C (°F) | -48.3 (-55) | FTMS 3456 |
| Pour Point, °C (°F) | <-31.7 (<-25) | ASTM D-97 |
| Flash Point, °C (°F) | 207.2 (405) | ASTM D-92 |
| Foam Test | | ASTM D-892 |
| Sequence I | pass | |
| Sequence II | pass | |
| Sequence III | pass | |
| API Gravity, 15.6/15.6°C | 22.3 | ASTM D-287 |
| Density, g/l (lbs./gal.), 15.6°C | 917.9 (7.66) | |
| Copper strip corrosion | | ASTM D-130 |
| 3 hrs. at 100°C | pass | |
| 3 hrs. at 121°C | pass | |
| Thermal heat test, 148.9°C | pass | Rckw. 076E |
| Timken OK Load | 40 | |
| Demulsibility | pass | Wheeling Steel Test |

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