

Product Description

Biopag GO is a fully formulated polyalkylene glycol (PAG) based synthetic high performance gear lubricant. Biopag GO is formulated with an advanced additive system to prevent oxidation, corrosion, foam and provide excellent wear protection. This product displays outstanding thermal, oxidative, and shear stability in gear applications that require high load protection and extended drain intervals. The low pour point and extremely high viscosity index increases effectiveness in applications where high and low temperature extremes are encountered.

Product Features

- Excellent load and wear protection
- Shear stability
- Extremely high viscosity index and low pour point
- Excellent rust and corrosion protection
- Excellent wear protection

Benefits

- Maximum gear life
- No solid formation
- Better oil flow and less start up wear
- Wide operating temperature range
- Maximum equipment life
- Longer oil life

Applications

- Helical, spiral, worm and bevel gears
- High and low ambient gear applications
- Heavy duty gear boxes

Physical Properties

| Criteria | Method | ISO 150 | ISO 220 | ISO 320 | ISO 460 | ISO 680 |
|--|-------------|---------|---------|---------|---------|---------|
| Viscosity cSt @ 40° C | ASTM D-445 | 154 | 220.1 | 316.6 | 465.0 | 680 |
| Viscosity cSt @ 100° C | ASTM D-445 | 30.0 | 40.5 | 56.5 | 77.5 | 115 |
| Viscosity Index | ASTM D2270 | 237 | 238 | 246 | 249 | 269 |
| Specific Gravity @ 60°F/15.6° C | ASTM D-4052 | 1.05 | 1.05 | 1.05 | 1.05 | 1.06 |
| Density, lb/gal | ASTM D-4052 | 8.75 | 8.75 | 8.75 | 8.75 | 8.88 |
| Flash Point, °C | ASTM D-92 | 265 | 266 | 262 | 268 | 287 |
| Pour Point, °C | ASTM D-5950 | -33 | -33 | -36 | -36 | -32 |
| Weld Load, kg | ASTM D 2783 | 190 | 190 | 190 | 200 | 190 |
| FZG, Fail Stage | DIN 51 354 | 12 | 12 | 12 | 12 | 12+ |
| Steel Corrosion | ASTM D665A | Pass | Pass | Pass | Pass | Pass |
| Copper Corrosion | ASTM D130 | | | | | |
| 3 Hours, 100°C | | 1b | 1b | 1b | 1b | 1b |
| 24 Hours, 100°C | | 1b | 1b | 1b | 1b | 1b |
| Four Ball Wear, mm | ASTM D4172 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Rolling bearing test rig FE 8, D 7, 5/80-80, | DIN51 819-3 | | | | | |
| wear of rolling elements, [mg] | ≤ 30 | Pass | Pass | Pass | Pass | Pass |
| wear of cage [mg] | ≤ 200 | Pass | Pass | Pass | Pass | Pass |

Notice: Physical Properties are typical of those obtained with normal production tolerances and do not constitute specifications.

Health and Safety: Based on available information, Biopag GO 680 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed.

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