

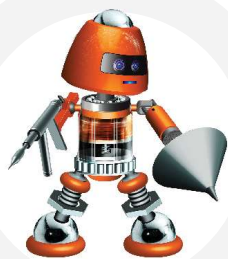
INDUSTRIAL | GREASE

HiTEC[®] 587

Premium Grease Additive Package



For Robust Extreme Pressure and Corrosion Protection



 **Afton**[®]
C H E M I C A L
Passion for Solutions[®]



HiTEC® 587 Premium Grease Additive Package

For Robust Extreme Pressure and Corrosion Protection

Application

HiTEC® 587 is a premium grease package offering robust corrosion protection under salt water conditions, high load-carrying capabilities and long-life protection at high temperatures. This additive system can be used to produce a robust, high temperature grease that will, at a minimum, meet NLGI's GC-LB performance specification in an appropriate grease thickener/base oil combination. Extreme pressure and corrosion protection along with high temperature performance beyond GC-LB are likely in a fully formulated finished grease. It can also be used as a "building block" with additional top treats being used to give extra performance in specialty grease applications.

Key Performance Benefits

- Excellent EP and load-carrying properties
- Outstanding corrosion protection
- Extended wear protection
- High thermal and oxidative stability

Recommended Dosage

The recommended treat rate for HiTEC® 587 is 2% to 5% wt. for typical grease applications depending on thickener type and performance level desired. Please contact your Afton Chemical representative for specific recommendations.

Typical Characteristics

| | |
|--------------------------------|----------|
| Specific Gravity @ 15.6/15.6°C | 1.01 |
| Viscosity @ 40°C, cSt | 60 |
| Flash Point, °C (PMCC) | 120 min. |

Handling Information

Max Handling Temp: 80°C
Shelf Life: 24 months @ ambient temperature

| Grease Description | | | Lithium-12 Base Mineral Oil |
|--|-------------------|----------------------|-----------------------------|
| Additive Pack | | | HiTEC® 587 |
| Treat Rate | | | 4.0 |
| Property | Test Method | Conditions | |
| Penetration unworked (0.1 mm) | ASTM D217 | | 280 |
| Penetration worked (0.1 mm) -60x | ASTM D217 | 25°C | 273 |
| Penetration worked (0.1 mm) -100K | ASTM D217 | 25°C | 260 |
| Dropping Point (°C) | ASTM D2286/IP 396 | | 204 |
| Shell Roll (0.1 mm) - delta pen | ASTM D1831 | 18h @ 65°C | 62 |
| Oil Separation (%m) | IP 121 | 18h @ 40°C | 1.9 |
| Copper Corrosion (-) | ASTM D4048 | 24h @ 100°C | 1b |
| Emcor Rust Test (-) | IP 220/ASTM D6138 | distilled water | 0/0 |
| Emcor Rust Test (-) | IP 220/ASTM D6138 | 100% SSW | 2/2 |
| Rust Test | ASTM D1743 | 48/distH2O/52°C | Pass |
| Four Ball Wear Test scar diameter (mm) | ASTM D2266 | 1h/75°C/1200rpm/40kg | 0.40 |
| Four Ball Weld Load (kg) | ASTM D2596 | | 315 |
| Timken OK Value/lbs. | ASTM D2509 | | 80 |
| Oxidation Stability (kPa) | ASTM D942/IP 142 | 99°C/100h | 20.7 |
| Wheel Bearing Life Test (h) | ASTM D3527 | 160°C | >80 |
| FAG FE 9 | DIN 51821-2 | report @ 130°C | F10: 130, F50: 169 |