



Krytox™ FPG 028

Performance Lubricants

MIL-PRF-27617 G Type IV Grease
Approval No. AFPET/PTPT 12-003

Product Information

Krytox™ FPG 028 is a smooth, buttery white grease. It has been specifically developed to operate over a wide temperature service range, -73 to 204 °C (-99 to 399 °F), to be resistant to hydrocarbon fuel and liquid oxygen, and to be used as a lubricant in aircraft, aerospace vehicles, and supporting equipment. It is a perfluoropolyether

(PFPE)-based grease thickened with a special high performance PTFE thickener, and has exceptional chemical and oxygen resistance. It is designed to operate under severe conditions, and can be used for bearings, gears, and as a lubricant for O-rings and elastomers.

Properties of Krytox™ FPG 028

CAGE No.: 7GFT8*

| Property | Analysis | Specification | Method |
|--|------------------------|---------------------|------------------|
| Penetration, Unworked | 268 | 225 min. | ASTM D1403 |
| Penetration, Worked | 269 | 235–310 | ASTM D1403 |
| Max. Change in Worked Penetration | 1 | 30 | ASTM D1403 |
| Corrosion on Copper | 1b | 2b max. | FTMS 5309 |
| High Temperature Bearing Performance | 1691 hr | 500 min. | ASTM D3336 |
| Evaporation, % after 22 hr at 204 °C (399 °F) | 6.61 | 15.0 max. | ASTM D2595 |
| Oil Separation, 204 °C (399 °F) | 14.25 | 20% max. | ASTM D6184 |
| Anti-Wear, Scar Diameter mm (max.), 40 kg load | | | |
| 52100, 75 °C (167 °F) | 0.94 | 1.0 max. | ASTM D2266 |
| 52100, 204 °C (399 °F) | 0.57 | 1.3 max. | ASTM D2266 |
| Extreme Pressure Weld, kg (min.) | >800 | 500 min. | ASTM D2596 |
| Solubility in Fuel | 0.1 | 20% max. | FTMS 5414 |
| Resistance to Fuel | Pass | Pass | FTMS 5414 |
| Resistance to Aqueous Solutions | Pass | Pass | FTMS 5415 |
| Film Stability and Corrosion on Steel | Pass | Pass | PRF 27617, 4.4.4 |
| Liquid Oxygen Impact Sensitivity | 0 reactions/20 impacts | No reaction | ASTM D2512 |
| Low Temperature Torque, g-cm at -62 °C (-80 °F) (max.) | Start 533, Run 121 | Start 800, Run 300 | ASTM D1478 |
| Low Temperature Torque, g-cm at -73 °C (-99 °F) (max.) | Start 1524, Run 364 | Start 2800, Run 800 | ASTM D1478 |
| Dirt Count | | | |
| 25–74 Micron | 45/cc | 1000 max. | FTMS 3005 |
| Over 75 Micron Diameter | 0 | 0 | FTMS 3005 |
| Additional Data | | | |
| Pour Point | <-69 °C (-92 °F) | — | ASTM D97 |
| Water Washout, % at 38 °C (100 °F) | 0.32 | — | ASTM D1264 |
| Oil Viscosity at 40 °C (104 °F), cSt | 50.45 | — | ASTM D445 |

*Code for Mil-Spec

