

TRIBOLUBE[®]-2N

High Performance Synthetic Grease

CHARACTERISTICS

Conforming to MIL-PRF-83261 requirements, the outstanding qualities of Tribolube-2N is its wide operating temperature range, extreme pressure and antiwear characteristics, non-migratory nature, low foreign and/or opaque particle content, high resistance to microwave energy, and its compatibility with plastic and elastomeric seals. Shelf life exceeds 10 years.

Tribolube-2NMS maintains the same physical properties as Tribolube-2N but is specially formulated with MoS₂ to enhance its already excellent extreme pressure and antiwear properties.

Tribolube-2NWS maintains the same physical properties as Tribolube-2N but is specially formulated with a special extreme

pressure additive to enhance its already excellent extreme pressure and antiwear properties.

APPLICATIONS

Aircraft actuators, gears, gimbal rings, oscillation bearings, antifriction and plain spherical bearings. It is especially suitable for use in applications using miniature bearings. Blower motors, motor generators, plastic clutches and gears, servo motors, microwave ovens, speedometer cables, motorcycle and automotive distributors, typewriters, business machines, etc. Other applications include subfractional horsepower gear motors, camera drive systems, microswitch assemblies, reduction gears, and scientific instruments.

| PERFORMANCE TEST | TEST METHOD | CONDITION | MIL-PRF-83261 REQUIREMENTS | TYPICAL VALUES |
|------------------------------|----------------------------|--|----------------------------|-----------------|
| Temperature Range | | | | -100°F to 450°F |
| NLGI No. | | | | 1 |
| Unworked Penetration | ASTM D-1403 | @ 77°F | | 304 |
| Worked Penetration | ASTM D-1403 | 60 Strokes | 270-350 | 318 |
| Worked Stability | FED-STD-791 Method 313 | 100,000 Strokes | 375 Max | 349 |
| Dropping Point | ASTM D-2265 | | 450°F | 460°F |
| Evaporation | ASTM D-2595 | 22 hrs @ 400°F | | 4.60% |
| | | 22 hrs @ 450°F | 15% Max | 10.62% |
| Oil Separation | ASTM D-1742 | 24 hrs @ 400°F | | 13.40% |
| | | 24 hrs @ 450°F | 20.0% Max | 18.50% |
| Water Washout | ASTM D-1264 | 1 hr @ 105°F | 20.0% Max | 2.20% |
| Density | | | | 1.85 gm/cc |
| Bomb Oxidation | ASTM D-942 | 100 hrs @ 250° | | -1.50 psi |
| Dirt Count | FED-STD-791 Method 3005 | 10-74 microns | | 23/cc |
| | | Over 75 microns | | 11/cc |
| Coef. of Friction | | 1,200 rpm, 90°F, 15 kg load | | 0.089 |
| Load Wear Index | ASTM D-2596 | | 90 Min | 208.3 |
| Last Non-seizure | | Load/Wear Scar | | None |
| Last Seizure | | Load/Wear Scar | | None |
| Weld Point | | Load | | +800 kg |
| Steel-on-Steel Wear | ASTM D-2266 | 1,200 rpm, 40 kg, 167°F, 2 hrs, 52100 Steel | 1.30 mm Max | 0.78 mm |
| | | 1,200 rpm, 40 kg, 167°F, 1 hr, 52100 Steel | | 0.65 mm |
| | | 1,200 rpm, 40 kg, 450°F, 2 hrs, M-50 Steel | 1.30 mmMax | 0.53 mm |
| | | 1,200 rpm, 40 kg, 450°F, 2 hrs, 440C Steel | | mm |
| High Temperature Performance | ASTM D-3336 | 450°F, 20,000 rpm, 5 lbs. | 500 hrs Min | 1,230 hrs |
| | | 450°F, 10,000 rpm, 5 lbs. | 500 hrs Min | 1,650 hrs |
| | | 400°F, 10,000 rpm, 5 lbs. | | 2,400 hrs |
| Low Temperature Torque | ASTM D-1478 | @ -100°F, Starting | 5,000 gm-cm Max | 2,145 gm-cm |
| | | Running | 1,000 gm-cm Max | 585 gm-cm |
| | | @ -65°F, Starting | | 460 gm-cm |
| | | Running | | 38 gm-cm |
| Rubber Swell | FED-STD-791 Method 3603 | | | |
| Buna "N" | | 168 hrs @ 158°F | | 4.20 % |
| Buna "N" | | 72 hrs @ 275°F | | 6.80% |
| Viton "B" | | 168 hrs @ 158°F | | 0.80% |
| Viton "B" | | 168 hrs @ 300°F | | 17.40% |
| Fluorosilicone | | 168 hrs @ 158°F | | 5.80% |
| Fluorosilicone | | 72 hrs @ 300°F | | 12.40% |
| Neoprene | | 168 hrs @ 158°F | | 11.80% |
| Neoprene | | 72 hrs @ 300°F | | 23.50% |