

Data Sheet

TorrLube Linear Purity Grease

Typical Properties of TorrLube® Linear Purity Grease

TorrLube Linear Purity Grease represents the best that fluorine chemistry can achieve in synthesizing perfluoropolyether molecules for unsurpassed extreme temperature serviceability, low volatility, and minimum viscosity changes as a function of temperature. Linear Purity Grease is a PTFE thickened, linear PFPE fluid possessing the following attributes:

- Excellent Thermooxidative Stability
- Wide Temperature Serviceability From -65 to 300°C
- Excellent Compatibility with Plastics and Elastomers
- Resistance to Aggressive Chemicals Including Fuels
- Ultrafiltered
- Extremely Low Volatility

| Degrees Centigrade | Vapor Pressure, Torr |
|--------------------|------------------------|
| 200 | 3.4 x 10 ⁻⁸ |
| 225 | 3.8 x 10 ⁻⁸ |
| 250 | 5.2 x 10 ⁻⁷ |

| Typical Properties Base Fluid: | Method | Result |
|--------------------------------|------------|------------------------|
| Color | Visual | Clear |
| KV100°C | ASTM D445 | 50 mm ² /s |
| KV40°C | ASTM D445 | 160 mm ² /s |
| Viscosity Index | ASTM D2270 | 360 |
| Flash Point | ASTM D92 | None |
| Pour Point | ASTM D97 | -75°C |

| Typical Properties of the Grease: | | |
|-----------------------------------|-----------------------|-----------------------------|
| Color | Visual | White |
| Appearance | Visual | Smooth |
| Po | ASTM D217 | 276 |
| P60 | ASTM D217 | 278 |
| NLGI Grade | ASTM D217 | 2 |
| Oil Separation, 24h at 100°C | ASTM D6084 | 3.4% |
| Evaporation, 24h at 100°C | CTM | 0.0% |
| Density, 25°C | CTM | 1.9 g/cc |
| Particulate Contamination | FTM 791, 3005.3 | TBD |
| Wear Characteristics | ASTM D2266 | 1.49 mm +/- 0.01mm |
| Apparent Viscosity, -40°C | Brookfield Viscometer | 2.4 x 10 ⁶ mPa.s |
| T-C Spindle, 1 RPM | | |
| TGA | CTM | >450°C |
| PDSC, 210°C | ASTM D5483 | No Reaction |

Notes:

TGA is thermogravimetric analysis conducted in an inert atmosphere of nitrogen. The temperature reported is the temperature at which rapid evaporation occurs.