## TRIBOLUBE-66

## Fluorinated Polyether Greases

## CHARACTERISTICS

Tribolube-66 is intended for use in mild to high pressure systems where nonreactive with LOX and GOX is required, strong acids, oxidizers, fuels, and solvents is required. Tribolube-66 is qualified to MIL-PRF-27617, Type 1. Although this lubricant is very inert, newly exposed rubbing surfaces of aluminum and magnesium may react with the greases under certain conditions.

## APPLICATIONS

This grease is suitable for scuba use as well in small and large diameter ball, roller, needle, and plain bearings, threads, valves, gears, contacts, splines, ball screws, and screw actuators and as a anti-seize thread compound. It is compatible with most elastomers and plastic seals, gaskets and O-rings.

| PERFORMANCE TEST | TEST METHOD | CONDITION | TYPICAL VALUES |
| :---: | :---: | :---: | :---: |
| Temperature Range |  |  | $-65^{\circ}$ to $300^{\circ} \mathrm{F}$ |
| NLGI Number |  |  | 1 |
| Unworked Penetration | ASTM D-1403 | @ $77^{\circ} \mathrm{F}$ | 307 |
| Worked Penetration | ASTM D-1403 | 60 Strokes | 313 |
| Oil Separation | FED-STD-791 | 30 hrs @ $212^{\circ} \mathrm{F}$ | 3.1\% |
|  | Method 321 | 30 hrs @ 300 ${ }^{\circ} \mathrm{F}$ | 6.2\% |
| Evaporation | ASTM D-2595 | 22 hrs @ 300 ${ }^{\circ} \mathrm{F}$ | 11.2\% |
| Low <br> Temperature | ASTM D-1478 | @ $-65^{\circ} \mathrm{F}$, starting | 5,070 gm-cm |
| Torque |  | 60 min running | 1,625 gm-cm |
| Copper Corrosion | FED-STD-791 <br> Method 5309 | 24 hrs @ $212^{\circ} \mathrm{F}$ | 1 b |
| Load Wear Index | ASTM D-2596 |  | 97.7 |
| Last Non-seizure |  | Load/Wear Scar | $40 \mathrm{~kg} / 0.33 \mathrm{~mm}$ |
| Last seizure |  | Load/Wear Scar | $315 \mathrm{~kg} / 0.92 \mathrm{~mm}$ |
| Weld Point |  | Load | 400 kg |
| Steel-on-Steel Wear | ASTM D-2266 | $\begin{gathered} \hline 1200 \mathrm{rpm}, 40 \mathrm{~kg}, \\ 1 \mathrm{hrs} @ 167^{\circ} \mathrm{F}, \\ 52100 \text { steel } \\ \hline \end{gathered}$ | 1.16 mm |
| High Temperature <br> Performance | ASTM D-3336 | $10,000 \mathrm{rpm}$ @ $400^{\circ} \mathrm{F}, 5 \mathrm{lb} . \mathrm{load}$ | hrs |
| Film Stability \& Steel Corrosion | Mil-G-27617D | 168 hrs @ $212^{\circ} \mathrm{F}$ | Pass |
| Water Washout | ASTM D-1264 | 1 hrs @ $105^{\circ} \mathrm{F}$ | 0.8\% |
| Resistance to Aqueous Solution | $\begin{gathered} \hline \text { FED-STD-791 } \\ \text { Method } 5415 \end{gathered}$ | 168 hrs @ $77^{\circ} \mathrm{F}$ | Pass |
| LOX Impact Sensitivity | ASTM D-2512 | 20 impacts from $1,100 \mathrm{~mm}$ | No Reaction |
| Fuel Solubility \& Fuel Resistance | FED-STD-791 <br> Method 5414 | $\begin{gathered} \text { @ } 77^{\circ} \mathrm{F} \\ 8 \mathrm{hrs} @ 77^{\circ} \mathrm{F} \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.20 \% \\ \text { Pass } \end{gathered}$ |
| Bomb Oxidation | ASTM D-942 | 100 hrs @ $250^{\circ} \mathrm{F}$ | 0 psi |

