

Beyond Synthetic™

Poly-Guard® FDA is recommended for use in compressors, pumps, gear boxes, bearings, hydraulic systems, blowers or almost any other equipment in food processing or pharmaceutical plants requiring oil.

Poly-Guard® FDA is a superior anti-wear, long life, synthetic lubricant that is NSF certified for H-1 service and meets the FDA CFR Title 21 Section 178.3620(b) purity requirement. Poly-Guard® FDA reduces wear and keeps equipment cleaner, allowing for substantially longer oil drain intervals. Using Poly-Guard® FDA saves money, minimizes inventory, reduces maintenance, improves equipment efficiency and extends equipment life. It is available in ISO viscosity grades 15 through 680. Poly-Guard® FDA is an undyed product.

Purolec® additive technology makes the difference!

Synthetic oils enable Royal Purple to make superior FDA / NSF H-1 lubricants, but it is Royal Purple's advanced Purolec® additive technology that gives Royal Purple's lubricants their superior performance advantages.

Purolec® additive technology provides outstanding anti-wear properties while providing excellent rust and corrosion protection to all metals. Purolec® additive technology also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

Performance Advantages:

- **Excellent Wear Protection**
Poly-Guard® FDA has superior anti-wear properties and provides superior protection to bearings, gears, etc.
- **Rapidly Separates from Water**
Poly-Guard® FDA rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir.
- **Longer Oil Life**
Poly-Guard® FDA has excellent oxidation stability that greatly extends oil change intervals while keeping equipment clean.
- **Multi-Temperature Performance**
Poly-Guard® FDA is stable at high temperatures and extremely fluid at low temperatures.
- **Excellent Corrosion Protection**
Poly-Guard® FDA protects ferrous and non-ferrous metals against rust and corrosion.
- **Lower Coefficient of Friction**
Poly-Guard® FDA saves energy.
- **High Purity**
Poly-Guard® FDA meets the FDA CFR Title 21 Section 178.3620(b) purity requirement and is NSF certified for H-1 service.
- **Compatible with Elastomers**
Poly-Guard® FDA has excellent compatibility with most elastomers.
- **Compatible with Other Oils**
Poly-Guard® FDA is compatible and can be mixed with other mineral oils and most synthetic oils. (It is not compatible with silicone or glycol synthetics.)
- **Environmentally Responsible**
Poly-Guard® FDA components are TSCA listed and meet EPA, RCRA and OSHA requirements. Poly-Guard® FDA extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

POLY-GUARD® FDA

High Performance FDA / NSF certified H-1 Oil

Ref

| Typical Properties* | ISO Grade | | | | | | |
|---------------------------|-----------|-------|-------|-------|-------|-------|-------|
| | 15 | 22 | 32 | 46 | 68 | 100 | 150 |
| AGMA Grade | — | — | — | 1 | 2 | 3 | 4 |
| Viscosity | | | | | | | |
| cSt @ 40°C | 15 | 22 | 32 | 46 | 68 | 100 | 150 |
| cSt @ 100°C | 3.6 | 4.6 | 6.0 | 7.7 | 10.0 | 12.7 | 16.5 |
| SSU @ 100°F | 82 | 115 | 164 | 235 | 349 | 517 | 782 |
| SSU @ 210°F | 38 | 42 | 46 | 52 | 60 | 70 | 86 |
| VI | 115 | 126 | 133 | 134 | 131 | 122 | 116 |
| Flash °F | 380 | 430 | 450 | 485 | 470 | 445 | 480 |
| Pour Point °F | -85 | -80 | -65 | -55 | -45 | -45 | -50 |
| Corrosion Test | | | | | | | |
| Copper, 3 hrs. @ 100°C | 1a | 1a | 1a | 1a | 1a | 1a | 1a |
| Foam Tendency Seq. II | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| D-1401 Demulsibility | | | | | | | |
| (40/40/0/20 max) | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Specific Gravity @ 60°F | 0.819 | 0.826 | 0.833 | 0.837 | 0.839 | 0.850 | 0.855 |
| Lbs. / Gal | 6.82 | 6.88 | 6.94 | 6.97 | 6.99 | 7.08 | 7.12 |
| FZG Test | 9 | 10 | 11 | 11 | 11 | 11 | 11 |
| Four Ball EP Test, 20 kg. | 0.35 | 0.35 | 0.33 | 0.32 | 0.30 | 0.32 | 0.32 |
| TOST, hours | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |

*Properties are typical and may vary