

SYNFILM[®] NGL

Hydrocarbon Gas Compressor Oil



Beyond Synthetic™

Synfilm[®] NGL is a long life, high film strength, synthetic lubricant specifically designed to increase the service life of rotary screw, centrifugal, reciprocating and rotary vane gas compressors in hydrocarbon gas service. It greatly resists dilution from hydrocarbon gasses that can cause significant viscosity losses in other compressor oils. Synfilm[®] NGL is formulated with Royal Purple's proprietary Synerlec[®] additive technology for maximum protection against wear and corrosion. It rapidly separates from water and has excellent thermal and oxidation stability to minimize deposits and extend drain intervals

Synerlec[®] additive technology makes the difference!

Synthetic oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synerlec[®] additive technology that gives Royal Purple's lubricants their amazing performance advantages. Synerlec[®] additive technology truly is *beyond synthetic*.™

Synerlec[®] additive technology forms a tough, slippery, synthetic film on all metal surfaces. This proprietary film significantly improves lubrication: first, by increasing oil film thickness and second, by increasing oil film toughness, both of which help to prevent metal-to-metal contact. It displaces moisture from metal surfaces and protects all metals against rust and corrosion. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

Performance Advantages:

- **High Film Strength**
Synfilm[®] NGL provides maximum protection against wear.
- **Greater Equipment Reliability and Safety**
Synfilm[®] NGL resists dilution from hydrocarbon gasses, thereby minimizing the potential for reductions in viscosity and flash point, which can increase wear and create a safety hazard to operators.
- **Rapidly Separates from Water**
Synfilm[®] NGL rapidly and completely separates from water.
- **High Oxidation Stability**
Synfilm[®] NGL's superior oxidation stability extends drain intervals while keeping the compressor clean.
- **Saves Energy**
Synfilm[®] NGL has a very low coefficient of friction. Energy savings of 1 to 3 percent or more are common.
- **Excellent Corrosion Protection**
Synfilm[®] NGL protects during operation and acts as a preservative oil during shutdown. Synthetic corrosion inhibitors ionically bond to metal surfaces displacing water and liquid hydrocarbons.
- **Compatible with Seals**
Synfilm[®] NGL has excellent seal compatibility.
- **Compatible with Other Oils**
Synfilm[®] NGL is compatible with most elastomers and can be mixed with other mineral oils and most synthetic oils. (It is not compatible with silicone or glycol based synthetics.)
- **Ashless**
Synfilm[®] NGL is ashless to help keep compressor parts free from deposits.
- **Environmentally Responsible**
Synfilm[®] NGL components are TSCA listed and meets EPA, RCRA and OSHA requirements. Synfilm[®] extends drain intervals and conserves energy.

| Typical Properties* | ISO Grade | | | | | | |
|--------------------------------|-----------|-------|-------|-------|-------|-------|-------|
| | 46 | 68 | 100 | 150 | 220 | 320 | 460 |
| Viscosity | | | | | | | |
| cSt @ 40°C | 46 | 68 | 100 | 150 | 220 | 320 | 460 |
| cSt @ 100°C | 6.7 | 9.0 | 12.0 | 15.0 | 20.0 | 26.0 | 32.0 |
| SSU @ 100°F | 238 | 352 | 520 | 787 | 1159 | 1695 | 2457 |
| SSU @ 210°F | 49 | 57 | 68 | 80 | 101 | 129 | 157 |
| Viscosity Index | 98 | 107 | 110 | 100 | 105 | 106 | 101 |
| Flash °F | 385 | 385 | 470 | 470 | 485 | 485 | 495 |
| Pour Point °F | -50 | -45 | -25 | -20 | -10 | -10 | -5 |
| Specific Gravity | 0.853 | 0.858 | 0.866 | 0.857 | 0.865 | 0.865 | 0.870 |
| D-892 Foaming | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| D-130 Copper Corrosion | | | | | | | |
| 24 hrs. @ 210°F | 1A | 1A | 1A | 1A | 1A | 1A | 1A |
| D-665 Rust Test | | | | | | | |
| Fresh Water | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Salt Water | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| D-2893 Oxidation, % vis. incr. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D-2783 4-Ball Weld, kg. | 315 | 315 | 315 | 315 | 315 | 315 | 315 |

*All properties are typical and may vary.