

# SYNFILM<sup>®</sup> RECIP.

Reciprocating Air Compressor Oil



## Beyond Synthetic™

Synfilm<sup>®</sup> Recip. is recommended for lubricating reciprocating air compressors.

Synfilm<sup>®</sup> Recip. is a long life, high film strength, energy efficient, synthetic lubricant that significantly increases the reliability and efficiency of reciprocating air compressors. It excels at reducing wear and keeping discharge valves free of harmful carbon deposits. Synfilm<sup>®</sup> Recip. forms a better seal and reduces friction between the cylinder wall and piston rings for greater compressor efficiency. It is formulated with Royal Purple's unique, proprietary Synerlec<sup>®</sup> additive technology, which is proven to make equipment run smoother, cooler, quieter, longer and more efficiently.

### Synerlec<sup>®</sup> additive technology makes the difference!

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

Synerlec<sup>®</sup> 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<sup>®</sup> Recip. protects bearings far beyond the ability of other compressor oils, carrying up to 700 percent greater loads.
- **Rapidly Separates from Water**  
Synfilm<sup>®</sup> Recip. rapidly separates from water, which easily is drained from the bottom of the oil reservoir.
- **Saves Energy**  
Synfilm<sup>®</sup> Recip. has an extremely low coefficient of friction that is proven to save energy over conventional oils. In reciprocating compressors these savings typically exceed the total cost of the oil within several months, making what was once an oil expense a profit.
- **Longer Oil Life**  
Synfilm<sup>®</sup> Recip. has outstanding oxidation stability that greatly extends oil change intervals while keeping equipment clean.
- **Excellent Corrosion Protection**  
Synfilm<sup>®</sup> Recip.'s tough oil film forms an ionic bond on metal surfaces, which acts as a preservative oil during shutdown and provides instant lubrication upon startup.
- **Synthetic Solvency**  
Synfilm<sup>®</sup> Recip.'s natural solvency excels at preventing the formation of carbon deposits on discharge valves, a common problem in high-pressure reciprocating air compressors. It also cleans up dirty compressors and keeps them clean.
- **Compatible with Other Oils**  
Synfilm<sup>®</sup> Recip. is compatible and can be mixed with other mineral oils and most synthetic oils. (Synfilm<sup>®</sup> Recip. is not compatible with silicone or glycol synthetics).
- **Environmentally Responsible**  
Synfilm<sup>®</sup> Recip. components are TSCA listed and meet EPA, RCRA and OSHA requirements. Synfilm<sup>®</sup> Recip. extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

Typical Properties*	ISO Grade			
	68	100	100 Multi-Vis.	150
Viscosity				
cSt @ 40°C	68	100	100	150
cSt @ 100°C	7.9	10.1	13.3	14.5
SSU @ 100°F	355	526	516	789
SSU @ 210°F	53	61	73	78
Flash °F	495	495	505	495
Viscosity Index	77	75	131	95
Pour Point °F	-30	-30	-30	-30
Specific Gravity @ 60/60°F	0.945	0.945	0.945	0.945
D-664 Acid Number	0.23	0.23	0.23	0.23
ASTM D-1401 Demulsibility	40/40/0/30	40/40/0/30	40/40/0/30	40/40/0/30
D-892 Foam Tests				
Sequence I, II, & III	Pass	Pass	Pass	Pass
D-130 Copper Corrosion				
3 hrs. @ 210°F	1a	1a	1a	1a
250 hrs. @ 210°F	1a	1a	1a	1a
Cincinnati Millicron "A"				
Corrosion / Oxidation	Pass	Pass	Pass	Pass
D-665 Rust Test				
Fresh Water	Pass	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass	Pass
D-2893 Dry Air Oxidation				
312 hrs. @ 203°F,				
% Viscosity Increase	0	0	0	0
Precip. No. (% Solids)	0	0	0	0

\*Properties are typical and may vary

Note: Synfilm<sup>®</sup> Recip.'s solvency cleans wear metals and deposits left behind by previous oils. These wear metals and deposits can become soluble in the new oil, causing abnormally high values on used oil analysis until equipment is clean.