

## Beyond Synthetic™

Synmist<sup>®</sup> is a high performance, synthetic lubricant specifically designed for use in centralized air mist lubrication systems. Synmist<sup>®</sup> is designed to readily atomize to eliminate large, unwanted, wet oil droplets that can accumulate in mist systems. Synmist<sup>®</sup> also exhibits superior reclassification properties that assures oil is delivered onto the bearing surface where it is needed. Synmist<sup>®</sup> gains its performance advantages through a superior blend of synthetic oils plus Royal Purple's proprietary Synerlec<sup>®</sup> additive technology, which forms a tenacious, ionic, protective film on bearing surfaces.

### 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 its 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 the oil film's thickness, and second, by increasing the oil film's 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**  
Synmist<sup>®</sup> protects bearings far beyond the ability of other mist oils by providing greater reliability and longer bearing life.
- **Saves Energy**  
Synmist<sup>®</sup> reduces friction in bearings and improves equipment efficiency.
- **Reduces Bearing Vibrations**  
The tough oil film of Synmist<sup>®</sup> coupled with its ability to micro-polish contacting bearing elements provides superior bearing lubrication.
- **Reduces Oil Usage**  
Because Synmist<sup>®</sup> with Synerlec<sup>®</sup> additive technology tenaciously adheres to bearing surfaces, mist rates can be reduced, which provides meaningful savings without adversely affecting reliability.
- **Rapidly Separates from Water**  
Synmist<sup>®</sup> will not emulsify — even in the presence of moist air.
- **Low Temperature Fluidity**  
Synmist<sup>®</sup> remains fluid at very low temperatures for winter service.
- **Compatibility**  
Synmist<sup>®</sup> is compatible with most synthetic and all mineral air mist oils.
- **Excellent Corrosion Protection**  
Synmist<sup>®</sup> leaves a tough oil film that forms an ionic bond on metal surfaces, which acts as a preservative oil during shutdown and provides instant lubrication upon startup.
- **Synthetic Solvency**  
Synmist<sup>®</sup> has excellent oxidation stability and synthetic solvency to keep bearings free of harmful oil deposits.
- **Environmentally Responsible**  
Synmist<sup>®</sup> components are TSCA listed and meet EPA, RCRA and OSHA requirements. Reduced mist rates lessen the amount of oil purchased and disposed of. Synmist<sup>®</sup> also conserves energy.

Typical Properties*	ISO Grade							
	32	46	68	100	150	220	320	460
Viscosity								
cSt @ 40°C	32	46	68	100	150	220	320	460
cSt @ 100°C	5.8	7.4	8.2	13.9	15.0	19.4	30.0	45.1
SSU @100°F	165	236	354	514	787	1162	1678	2400
SSU @ 210°F	46	51	54	75	80	99	147	218
Viscosity Index	123	124	84	139	101	100	128	153
Flash °F	455	465	480	490	500	500	525	550
Pour Point °F	-75	-75	-55	-40	-35	-35	-15	-5
Corrosion Test	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Rust Test								
Fresh Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Demulsibility	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Timken OK Load, Lbs.	60	60	60	60	60	60	60	60
Four Ball EP Test								
Weld Load, kgf	315	315	315	315	315	315	315	315

\*Properties are typical and may vary