



## Monolec® Paper Machine Lubricant (6190-6140)

Premium quality paper machine oil made from select paraffinic base oil. Specifically formulated to provide excellent thermal oxidation stability and rust and corrosion protection for long oil life. Excellent detergency prevents carbon deposit build-up and coking to minimize oil system plugging and premature bearing failures. Excellent wear protection provided by additives including Monolec, LE's proprietary wear-reducing additive.

	<u>6190</u>	<u>6140</u>
<b>Color</b>	Red	Red
<b>ISO VG / SAE Grade</b>	220	320
<b>Relative Density @ 60°F/60°F, ASTM D1298</b>	0.886	0.886
<b>Viscosity @ 100°C, cSt, ASTM D445</b>	19.30	24.55
<b>Viscosity @ 40°C, cSt, ASTM D445</b>	230.2	335.1
<b>Viscosity Index ASTM D2270</b>	≥95	≥95
<b>Flash Point °C (°F) (COC), ASTM D92</b>	268 (515)	268 (515)
<b>Pour Point °C (°F), ASTM D97</b>	-12 (10)	-12 (10)
<b>Rust Test 4 hrs @ 60°C, DI H<sub>2</sub>O, ASTM D665A</b>	Pass	Pass
<b>Rust Test 4 hrs @ 60°C, Sea H<sub>2</sub>O, ASTM D665B</b>	Pass	Pass
<b>Copper Corrosion 3 hrs @ 100°C, ASTM D130</b>	1a	1a
<b>Oxidation by RPVOT @ 150°C, minutes, ASTM D2272</b>	263	253
<b>Four-Ball EP Weld Point, kgf, ASTM D2783</b>	200	200
<b>Four-Ball Wear @75°C, 1200 rpm, 15 kgf, 60 minutes, mm wear, ASTM D4172</b>	0.37	.40
<b>Emulsion Characteristics @82°C, oil-water-emulsion/minutes, ASTM D1401</b>	40-40-0/10	40-40-0/10
<b>Air Release &gt;90.0 cSt @ 40°C: 75°C, minutes, ASTM D3427</b>	10.77	—

### Beneficial Qualities

- Excellent filterability
- Excellent oxidation resistance (20-25% better than commercial paper machine lubricants)
- Precipitate values 15% lower than commercial paper machine oils in Cincinnati-Machine Thermal Stability Test
- Smaller scar diameter in Four-Ball EP test when compared to commercial paper machine oils

### Typical Applications

For use on hot bearings in paper machine circulating systems, where high oxidation stability and detergency are needed to minimize deposits caused by long exposure to steam heat.

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