

Beyond Synthetic™

Syndraulic[®] is a clean, long life, energy efficient, minimum leak, hydraulic oil possessing exceptional film strength and wear protection properties. It is formulated to greatly increase both the life of the oil and the seals, filters and pumps of hydraulic systems. Syndraulic[®] is formulated with Royal Purple's proprietary Synerlec[®] additive technology. It can lower operating temperatures and restore normal operation to erratically operating hydraulic systems.

Syndraulic[®] Meets or Exceeds the Requirements of these Manufacturers:

- Cincinnati Milacron P-68, 69, 70
- Denison P-46; T-5D; HF-0, 1, 2
- Vickers 104C vane; 35VQ-25
- Sperry Vickers I-286-S; M-2950-S
- Racine Model S, Variable Volume
- Din 51524, Part 2
- Lee Norse 100-1
- Jeffery No. 87
- Ford M-6C32
- U.S. Steel 127, 136
- B.F. Goodrich 0152
- General Motors LH-04-1, 06-1, 15-1
- Commercial Hydraulics (except PM-500 silver)
- AFNORE E 48-603

Performance Advantages:

- **High Film Strength**
Syndraulic[®] protects hydraulic components beyond the ability of other hydraulic oils.
- **Longer Oil Life**
Syndraulic[®] has exceptional oxidation stability that greatly extends oil change intervals while keeping systems clean.
- **Extremely Clean**
Clean oil is critical to the life and reliability of hydraulic systems. Syndraulic[®] is packaged in new, clean poly containers and filtered to a typical ISO 4406 Cleanliness Level of 14/13/11. (Currently for ISO viscosity grades 32, 46, and 68 only.) This is up to 250 times cleaner than other hydraulic oils delivered in steel drums or by bulk delivery.
- **Improved System Performance**
Syndraulic[®] frequently lowers operating temperatures and restores smooth, consistent performance to erratically operating hydraulic systems.
- **Excellent Corrosion Protection**
Syndraulic's tough oil film forms an ionic bond on metal surfaces. This tough film not only protects during operation and acts as a preservative oil during shutdown, but also provides instant lubrication on startup to prevent wear.
- **Rapidly Separates from Water**
Syndraulic[®] rapidly and completely separates from water.
- **Compatible with Seals**
Syndraulic[®] has excellent seal compatibility.
- **Environmentally Responsible**
Syndraulic[®] extends oil drain intervals due to longer oil service life, eliminates premature oil changes due to oil / water emulsions, greatly reduces oil purchase and disposal costs and conserves energy.

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.

Typical Properties*	ISO Grade						
	10	15	32	46	68	100	150
Viscosity							
cSt @ 40°C	10	15	32	46	68	100	150
cSt @ 100°C	2.8	3.7	5.7	7.1	9.3	11.6	15.1
SSU @ 100°F	61	82	165	237	351	521	787
SSU @ 210°F	36	39	45	50	58	66	80
Viscosity Index	102	125	116	112	113	104	101
Specific Gravity @60°F	0.8347	0.8424	0.8741	0.8808	0.8818	0.8852	0.8863
Flash °F	380	380	410	440	430	450	450
Pour Point °F	-40	-40	-40	-40	-35	-35	-35
ISO Cleanliness Level	**	**	14/13/11	14/13/11	14/13/11	NA	NA
D-1401 Demulsibility	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D-892 Foam Tendency	Nil	Nil	Nil	Nil	Nil	Nil	Nil
D-130 Copper Corrosion							
3 hrs. @ 210°F	1A	1A	1A	1A	1A	1A	1A
24 hrs. @ 210°F	1A	1A	1A	1A	1A	1A	1A
Cincinnati Millicron "A"							
Corrosion / Oxidation	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D-665 Rust Test							
Fresh Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Note: When changing to Syndraulic®, its solvency cleans wear metals and deposits left by previous oils. These wear metals and deposits may cause abnormally high values based on used oil analysis until equipment is clean.

*All properties are typical and may vary.

**Check with manufacturer regarding availability with 14/13/11 cleanliness.