



SYNDRAULIC®

HIGH PERFORMANCE HYDRAULIC OIL

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 32, 46, and 68 are NSF certified for H2 service.

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 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**
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 4406:99 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.

TYPICAL PROPERTIES*	ASTM METHOD	ISO GRADE							
		10	15	22	32***	46***	68***	100	150
Viscosity	D-445								
cSt @ 40°C		10	15	22	32	46	68	100	150
cSt @ 100°C		<2.0	2.6	4.3	5.5	6.9	8.9	11.4	14.8
Viscosity Index	D-2270	---	100	104	108	105	104	100	98
Flash Point, °F	D-92	380	380	390	435	415	440	450	450
Pour Point, °F	D-6892	-70	-65	-71	-49	-44	-27	-27	-27
Copper Corrosion Test	D-130								
3 Hrs @ 100°C		1A	1A	1A	1A	1A	1A	1A	1A
240 Hrs @ 100°C		1A	1A	1A	1A	1A	1A	1A	1A
Rust Test	D-665								
Fresh Water		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Salt Water		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Foam Test, Seq II	D-892								
Initial/Final/Time(sec)		39/0/13	8/0/3	17/0/4	4/0/1	11/0/3	8/0/3	10/0/6	4/0/2
Demulsibility Test	D-1401								
Mins @ 130°F		10	10	10	15	20	20	---	---
Mins @ 180°F		---	---	---	---	---	---	15	15
Cincinnati Millicron "A"	D-2070								
Corrosion / Oxidation		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
ISO Cleanliness Level	ISO 4406	**	**	---	14/13/11	14/13/11	14/13/11	N/A	N/A
Density, lbs/g	D-4052	6.94	7.19	7.23	7.31	7.35	7.39	7.47	7.48

*Properties are typical and may vary

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

***NSF certified H2

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