

SYNDRAULIC

HIGH-PERFORMANCE HYDRAULIC OIL

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.

Synthetic base oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synerlec additive technology that gives its 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.

Syndraulic 32, 46, and 68 are filter to an ISO 4406 cleanliness of 14/13/11* and these three viscosity grades are NSF certified for H2 service.

PERFORMANCE ADVANTAGES

HIGH FILM STRENGTH - Synerlec® additive technology dramatically reduces metal-to-metal contact, friction, and wear

EXCEPTIONAL CORROSION & RUST

PROTECTION - Prevents internal damage to equipment from chemical attack

SUPERIOR OXIDATION & THERMAL

STABILITY - Resists oil degradation and varnish formation for longer oil life

OUTSTANDING SYSTEM PERFORMANCE -

Provides a wide operating temperature range and excellent shear stability

EXCELLENT DEMULSIBILITY - Rapidly separates from water, allowing free water to be drained from the system

OUTSTANDING ELASTOMER COMPATIBILITY

- Will not harm seals designed for use with lubricating oils

^{*} ISO cleanliness is measured and determined to be at most 14/13/11 before anti-foam additive put into the oil.



SYNDRAULIC

HIGH-PERFORMANCE HYDRAULIC OIL

TECHNICAL DATA

Property	Test Method	32	46	68	150
Density @15°C, g/cm3	ASTM D4052	0.88	0.88	0.88	0.86
Viscosity @ 40°C, cSt	ASTM D445	32	46	68	150
Viscosity @ 100°C, cSt	ASTM D445	5.5	6.9	8.9	15.1
Viscosity Index	ASTM D2270	108	106	104	101
Flash Point, °C (°F)	ASTM D92	219 (426)	224 (435)	227 (441)	232 (450)
Pour Point, °C (°F)	ASTM D97	-45 (-49)	-39 (-38)	-36 (-33)	-33 (-27)
Rust Preventing, Fresh Water	ASTM D665A	PASS	PASS	PASS	PASS
Rust Preventing, Salt Water	ASTM D665B	PASS	PASS	PASS	PASS
Cu Corrosion, 3hr @ 100°C	ASTM D130	1A	1A	1A	1A
Foam Tendency, Seq. I, II, III	ASTM D892	0/0	0/0	0/0	0/0
Demulsibility, @130°F	ASTM D1401	40/38/2 (15)	43/37/0 (15)	43/37/0 (20)	
Demulsibility, @180°F	ASTM D1401				43/37/0 (10)