



SYNFILM®

INDUSTRIAL COMPRESSOR AND PUMP OIL

Synfilm®, Royal Purple's bestselling industrial lubricant, is recommended for air compressors, pumps, steam turbines, bearings, gears, air tools, etc. Synfilm is a long life, high film strength, energy efficient, synthetic lubricant that significantly increases bearing life and equipment reliability. Synfilm® gains its performance advantage over competing mineral and synthetic oils through its superior blend of synthetic base oils plus Royal Purple's proprietary Synerlec additive technology. This unique additive technology is proven to make equipment run smoother, cooler, quieter, longer and more efficiently. Synfilm typically replaces conventional, low film strength, R&O (rust and oxidation inhibited) oils that rely solely on their viscosity to protect equipment against wear.

Synthetic base oils provide the foundation that enables 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 by drastically increasing the oil film's strength which helps to prevent metal-to-metal contact. With less metal-to-metal contact, friction, heat, and wear are greatly reduced. Synerlec® 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

SUPERIOR FILM STRENGTH – Protects bearings far beyond the ability of other compressor and pump oils, carrying up to 700% greater loads

EXCELLENT DEMULSIBILITY – Rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir

INCREASED EFFICIENCY – Extremely low coefficient of friction reduces parasitic loss in equipment, saving energy over conventional oils

OUTSTANDING OXIDATION RESISTANCE – Greatly increases the useful life of the lubricant

EXCELLENT CORROSION PROTECTION – Forms an ionic bond on metal surfaces, which displaces water with rust inhibiting chemistry

REDUCES BEARING VIBRATIONS – Tough oil film along with an ability to micro-mend bearing surfaces provides superior bearing lubrication

WIDE SEAL COMPATIBILITY RANGE – Compatible with all materials commonly used in oils seals, such as fluoroelastomers, neoprene, Buna N (except high ACN), and silicone. It is not for use with EPDM or EPR elastomers.



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TECHNICAL DATA

Property	Test Method	32	46	68	100	150
SAE Grade	SAE J306	SAE 12	SAE 20/SAE 80	SAE 30/SAE 80	SAE 40/SAE 85	SAE 50/SAE 90
ISO Grade	ISO 3448	32	46	68	100	150
Viscosity @ 40°C, cSt	ASTM D445	32	46	68	100	150
Viscosity @ 100°C, cSt	ASTM D445	5.8	7.6	9.9	12.9	17.1
Viscosity Index	ASTM D2270	125	132	128	125	124
Specific Gravity	ASTM D4052	0.856	0.862	0.866	0.872	0.876
Flash Point, °C (°F)	ASTM D92	221 (430)	252 (485)	235 (455)	252 (455)	260 (500)
Pour Point, °C (°F)	ASTM D97	-57 (-71)	-50 (-58)	-43 (-45)	-43 (-45)	-36 (-33)
Cu Corrosion, 3hr @ 100°C	ASTM D130	1A	1A	1A	1A	1A
Cu Corrosion, 24hr @ 100°C	ASTM D130	1A	1A	1A	1A	1A
Rust Preventing, Fresh Water	ASTM D665A	PASS	PASS	PASS	PASS	PASS
Rust Preventing, Salt Water	ASTM D665B	PASS	PASS	PASS	PASS	PASS
Demulsibility, @130°F	ASTM D1401	41/38/1 (5)	41/38/1 (5)	43/35/2 (5)	--	--
Demulsibility, @180°F	ASTM D1401	--	--	--	40/40/0 (5)	40/38/2 (5)

5/4/2021