



SYNFILM GT

MULTI-PURPOSE INDUSTRIAL OIL

BEYOND SYNTHETIC®

Synfilm GT is Royal Purple's most versatile lubricant. In the appropriate viscosity grade, it is recommended for use in gas and steam turbines, air misting systems, centrifugal compressors, pumps, vacuum pumps, blowers, bearings, gears, in certain worm gear application, etc. Synfilm GT should be considered instead of Synfilm when oil reservoir temperatures exceed 175°F, improved low temperature fluidity is desired or when a viscosity grade is not available in Synfilm.

Synfilm GT is a long life, high film strength, energy efficient, synthetic lubricant that significantly increases bearing life and equipment reliability. Synfilm GT gains its performance advantages 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 GT typically is used to upgrade from conventional, low film strength, R&O and lightly formulated circulating oils that rely primarily on their viscosity to protect equipment against wear. In certain applications Synfilm GT also excels in replacing premium E.P. and Synthetic gear oils, in demanding gear and bearing service.

Synfilm GT 32, 46, 68, 100, 150, 220, 320 and 460 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 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.

PERFORMANCE ADVANTAGES

High Film Strength

Synfilm GT protects bearings far beyond the ability of other compressor and pump oils, carrying up to 700 percent greater loads.

Rapidly Separates from Water

Synfilm GT rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir.

Saves Energy

Synfilm GT has an extremely low coefficient of friction that is proven to save energy over conventional oils. In rotating equipment these savings frequently exceed the total cost of the oil within several months, making what was once an oil expense a profit.

Extremely Clean

Synfilm GT has a typical ISO 4406 Cleanliness Level of 14/13/11*, which is verified by a laser particle counter.

*Currently for ISO viscosity grades 32, 46, and 68 only.

Reduces Bearing Vibrations

The tough oil film of Synfilm GT coupled with its ability to micro-polish contacting bearing elements provides superior bearing lubrication.



Longer Oil Life

Synfilm GT has outstanding oxidation stability that greatly extends oil change intervals while keeping equipment clean.

Excellent Corrosion Protection

The tough oil film of Synfilm GT forms an ionic bond on metal surfaces, which acts as a preservative oil during shutdown and provides instant lubrication upon startup.

Synthetic Solvency

The natural solvency of Synfilm GT cleans up dirty equipment and keeps it clean.

Compatible with Seals

Synfilm GT has excellent compatibility with most seals.

Compatible with Other Oils

Synfilm GT can be mixed with mineral oils and most synthetic oils. (It is not compatible with silicone or glycol synthetics.)

Environmentally Responsible

Synfilm GT components are TSCA listed and meet EPA, RCRA and OSHA requirements. Synfilm extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

Typical Properties*	Method	ISO Grade									
		22	32	46	68	100	150	220	320	460	680
Viscosity	D-445	22	32	46	68	100	150	220	320	460	680
cSt @ 40°C		4.3	6	7.5	10	13.6	17	23.2	30	37.8	50
cSt @ 100°C		120	135	135	135	130	130	125	125	125	125
Viscosity Index	D-2270	350	455	455	485	475	465	445	445	455	455
Flash Point, °F	D-92	-71	-38	-38	-38	-44	-44	-44	-40	-44	-38
Pour Point, °F	D-6892										
Copper Corrosion Test	D-130	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
3 Hrs @ 100°C		1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
24 Hrs @ 100°C											
Rust Test	D-665	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fresh Water		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Salt Water		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Foam Test, Seq II	D-892	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Demulsibility Test	D-1401										
Mins @ 130°F		39/40/1(10)	39/38/3(10)	40/38/2(10)	40/38/2(5)	---	---	---	---	---	---
Mins @ 180°F		---	---	---	---	40/39/1(10)	38/40/2(10)	41/38/1(10)	43/37/0(10)	43/37/0(5)	43/37/0(5)
Cincinnati Millicron "A"	D-2070										
Corrosion / Oxidation		PASS	PASS	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	N/A	N/A	N/A	N/A
Density, lbs/gal	D-4052	7	7.05	7.08	7.14	7.19	7.22	7.27	7.31	7.35	7.4

*Properties are typical and may vary.