



SYNFILM® GT WIND GEAR 320

HIGH-PERFORMANCE SYNTHETIC SEVERE SERVICE WORM DRIVE GEAR OIL

Synfilm® GT Wind Gear 320 is a synthetic gear oil specifically formulated to meet the challenging requirements of modern wind turbine gearboxes. Synfilm GT Wind Gear 320 has proven to allow extended safe drains of up to six years while providing unparalleled wear protection for both bearings and gears. The product has also shown to improve Turbine efficiency by reducing parasitic loss in the gear units. Synfilm GT Wind Gear 320 is a long life, high film strength, energy efficient synthetic lubricant that significantly increases bearing life and equipment reliability. Synfilm GT Wind Gear 320 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.

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.

This special version of Synfilm GT receives special filtration to an ISO 4406 cleanliness of no more than 14/13/11 (before the addition of anti-foam). The anti-foam characteristics of this lubricant are also enhanced to better mitigate the foaming tendency of some wind turbine gear boxes. Synfilm GT Wind Gear 320 is an undyed product.

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 and resists varnish formation

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 oil seals, such as fluoroeleostomers, neoprene, Buna N (except high CAN), and silicone. It is not for use with EPDM or EPR elastomers.



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TECHNICAL DATA

Property	Test Method	320
SAE Grade	SAE J300	SAE 140
ISO Grade	ISO 3448	320
Viscosity @ 40°C, cSt	ASTM D445	320
Viscosity @ 100°C, cSt	ASTM D445	28.8
Viscosity Index	ASTM D2270	122
Specific Gravity, @ 60/60°F	ASTM D4052	0.878
Flash Point, °F/°C	ASTM D92	218 (425)
Pour Point, °F/°C	ASTM D97	-43 (-45)
Cu Corrosion, 3hr @ 100°C	ASTM D130	1A
Cu Corrosion, 24hr @ 100°C	ASTM D130	1A
Cu Corrosion, 3hr @ 121°C	ASTM D130	1A
Rust Preventing, Fresh Water	ASTM D665A	PASS
Rust Preventing, Salt Water	ASTM D665B	PASS
Demulsibility, @180°F	ASTM D1401	42/37/0 (10)
Foam Test, Seq. II	ASTM D892	0/0/0
FZG Scuffing Load, A/8 3/90	DIN 51354	14+

3/26/2025