



QUADREX

FOUR CYCLE GAS ENGINE OIL

BEYOND SYNTHETIC®

Quadrex is a low ash, synthetic blend, high performance, four-cycle natural gas engine oil. Quadrex extends oil drain intervals, reduces fuel consumption and keeps engines clean. Its tough film strength significantly improves engine reliability and reduces maintenance costs.

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

Reduces Maintenance Costs

Quadrex improves engine reliability and extends engine life.

Outstanding Film Strength

Quadrex provides superior protection to the crank and bearings and prevents piston ring / cylinder seizing and scuffing.

Extends Oil Drain Intervals

The outstanding oxidation and nitration stability of Quadrex greatly extend oil drain intervals. Much less oil is purchased and disposed of and less oil is consumed.

Saves Fuel

Quadrex has a low coefficient of friction and promotes improved sealing between piston rings and cylinder walls to improve combustion efficiency.

Cleaner Engines

Quadrex is excellent for lean burn, fuel efficient engines that cause rapid oil oxidation, dirty engines and shorter oil and filter life.

Catalyst Compatible

Quadrex is safe to use with catalytic converters and exhaust catalyst.

Synthetic Solvency

The synthetic solvency of Quadrex will clean dirty engines; however, oil and filter life may be shortened as it cleans up deposits left by previous oils. To rapidly clean up dirty engines, use Royal Purple's Max-Solv™. For more information, request the Max-Solv product sheet.

Environmentally Responsible

All components in Quadrex are TSCA listed and meet EPA, RCRA and OSHA requirements. Quadrex extends oil drain intervals, decreases the amount of oil purchased and disposed of and conserves energy.



Low Ash (0.45 percent)**

Quadrex is preferable for four-cycle natural gas engines and acceptable for most two-cycle gas engines

Superior Corrosion Protection

Quadrex contains synthetic inhibitors and has a moderately high base number to protect against rust and corrosion during operation and to preserve the engine during shut-down. (It is especially suited for land fill and co-generation engines.)

Low Temperature Fluidity

Quadrex has excellent low temperature pumpability and reduces the need for oil heaters.

Four-Cycle Engines

<u>Manufacturer</u>	<u>Lubricant</u>
Cooper-Bessemer	
BMEP <175 PSI	Quadrex SAE 40
BMEP >175 PSI	Quadrex SAE 40
Ingersol (Dresser Rand)	
Category I, II, III	Quadrex SAE 30
Superior	
Natural Aspirated	Quadrex SAE 40
Waukesha	
All Gas Engine Models	
Oil Temp. 160-195°F	Quadrex SAE 30
Oil Temp. 195-230°F	Quadrex SAE 40
Caterpillar	
All Models	Quadrex SAE 30, 40

Note: models 3300, 3400, 3500, & 3600 — low ash oil is preferred.

		SAE Grade
Typical Properties*	Method	40
Density, lbs/gal	D4052	7.47
Viscosity	D445	
cSt @ 40°C		125.7
cSt @ 100°C		13.6
Viscosity Index	D2270	105
Copper Corrosion	D130	1A
Sulfated Ash %	D892	0.45
Pour Point, °F/°C	D97	-27/-33
Foam Test, Seq III	D892	0/0/0
Four Ball EP Test, kgf	D2783	315
Flash Point, °F/°C	D92	425/218

*Properties are typical and may vary.