CAP™

Cylinder and Packing Gland Lubricant for Compressors

ROYAL PURPLE®
Beyond Synthetic™

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CAP™ is recommended for use in reciprocating compressors that compress inert gasses such as natural gas, hydrogen, nitrogen, carbon dioxide, methane, ethane, butane, propane, helium, etc. CAP™ is primarily used in natural gas reinjection compressors.

CAP™ is a multi-synthetic lubricant that excels in lubricating cylinders and packing glands in gas compressors. CAP™ forms a tacky, tenacious, synthetic oil film on both metal and ceramic surfaces. It is extremely shear stable, impermeable to water vapor and hydrocarbon gasses and has excellent elastohydrodynamic properties to prevent wear in high pressure compressors.

CAP™ is specially formulated to prevent corrosion of compressors by hydrogen sulfide, wet carbon dioxide and other acids. The dense, closely packed molecular structures in CAP™ greatly resist dilution from high pressure gasses, therefore maintaining its viscosity to prevent oil carry-over normally experienced with other oils. Its superior ability to adhere to metallic parts, including compressor cylinder walls, allows piston rings to ride on a film of oil even when they're subjected to high pressures. This tough film provides smoother, cleaner operations and extended compressor life.

In reinjection compressors, CAP™ has significantly reduced wear and greatly extended the life of packing glands and cylinders compared to competing oils. Due to the unique properties of CAP™, injection feed rates to cylinders can be reduced, which improves downstream cleanliness while minimizing potential problems with fouling of equipment and formations.

CAP™ also is an excellent lubricant for nonmetallic materials such as teflon®, glass, etc. It forms an effective physical barrier between parts to minimize oil carry-over, to prevent gas blowby and to greatly extend compressor life. Teflon® is a registered trademark of E.I. Dupont.

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.

Typical Properties*	CAP460	CAP680	CAP3X
Viscosity			
cSt @ 40˚C	460	680	255
cSt @ 100˚C	25.0	32.5	21.5
SSU @100˚F	2503	3723	1349
SSU @ 210˚F	125	160	108
Viscosity Index	66	72	70
Flash ˚F	475	475	475
Fire ˚F	535	535	535
Pour Point ˚F	-20	-20	-20
Density, Lbs./Gal.	7.32	7.32	7.235
Demulsibility	Pass	Pass	Pass
Foam Test, Sequence II	Pass	Pass	Pass

*Properties are typical and may vary
Available in other viscosity grades

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