



## **CAP**

### ***CYLINDER AND PACKING GLAND LUBRICANT FOR COMPRESSORS***

#### **BEYOND SYNTHETIC®**

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 commonly used in 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 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.

#### **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**

**Prolongs Cylinder and Packing Life**

**Reduces Maintenance Costs**

**Excels in High Pressure Gas Service (up to 10,000 PSI in natural gas reinjection compressors)**

**Excellent Corrosion Protection with H<sub>2</sub>S and CO<sub>2</sub>**

Typical Properties*	Method	700/460
Density, lbs/gal	D4052	7.3
Viscosity	D445	
cSt @ 40°C		460
cSt @ 100°C		29
Viscosity Index	D2270	124
Flash Point, °F/°C	D92	430/221
Pour Point, °F/°C	D97	-33/-36

*\*Properties are typical and may vary.*