

CITGO COMPRESSORGARD® PAG



Date 08/17

**DESCRIPTION:** CITGO CompressorGard PAG products are designed especially for high pressure reciprocating compressors operating with natural gas, carbon dioxide, hydrogen, helium, nitrogen, ammonia and other polar gasses.

**QUALITIES:** CITGO CompressorGard PAG products are resistant to hydrocarbon dilution and absorption of the gas stream. As a result, condensed hydrocarbon liquids in the cylinder area do not wash the lubricant from the cylinder walls. Other lubricants which absorb these liquids lose viscosity, which can result in severe mechanical damage. The high viscosity index and low pour points allow usage over a wide temperature range.

- BENEFITS:**
- Permits reduced maintenance costs and decreased downtime due to improved lubrication.
  - Minimizes problems downstream in separators, meters, filters, etc. due to lower lubricant consumption.
  - Allows easier handling and lower disposal costs.
  - Reduces absorption of lubricating oil into the gas at higher pressures.
  - Minimizes viscosity degradation when saturated with high pressure gas.
  - Provides excellent resistance to wash-off by liquid hydrocarbon gases.
  - Offers compatibility with well bore fluids and treating chemicals, therefore reducing incidence of well impairment.

**APPLICATIONS:** CITGO CompressorGard PAG products are excellent for flooded rotary screw and vane compressors used to compress natural gas, carbon dioxide and other gaseous hydrocarbons. CITGO CompressorGard PAG products of appropriate grade viscosity are also suitable for use as a reciprocating compressor cylinder lubricant when processing these and other gases requiring chemical resistance.

**TYPICAL PROPERTIES:**

**CITGO COMPRESSORGARD® PAG**

ISO Viscosity Grade	80	100	150	220
Material Code	632542001	632538001	632348001	632595001
Gravity, °API	4.6	4.2	3.7	3.5
Specific Gravity	1.04	1.04	1.05	1.05
Density, lb/gal. 60/60°F	8.66	8.67	8.71	8.73
Viscosity, ASTM D 445, cSt at 40°C	85	107	154.1	220
cSt at 100°C	16.8	21.1	29.3	41.05
Viscosity Index, ASTM D 2270	215	223	232	241
Flash Point, ASTM D 92, °F (°C)	550 (288)	555 (291)	547 (286)	554 (290)
Pour Point, ASTM D 97, °F (°C)	-60 (-51)	-54 (-48)	-49 (-45)	-49 (-45)
Color, ASTM D 1500	L 0.5	L 0.5	L 0.5	L 0.5
Copper Strip Corrosion, ASTM D 130	1A	1A	1A	1A
Rust Protection, ASTM D 665A	Pass	Pass	Pass	Pass
Four Ball Wear, ASTM D 4172, Mm @ 40KG	0.52	0.64	0.63	0.83
Foam Resistance, ASTM D 892 Sequence I, II, III	Pass	Pass	Pass	Pass
Carbon Residue, mg	0.01	0.01	0.01	0.01

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