C I T G O C Y L I N D E R O I L S

Date 01/06

DESCRIPTION: CITGO Cylinder Oils are compounded lubricants designed primarily for specific use in steam cylinders, gas compressor cylinders, and worm gear drives.

QUALITIES: These cylinder oils are formulated with high viscosity index base stocks. Both grades are compounded with a high-grade animal fatty oil for improved metal adhesion.

Because of their fat content, these oils provide excellent lubrication even when in contact with steam of low-to-medium pressure and of wet-to-saturated quality.

APPLICATIONS: CITGO Cylinder Oils are recommended for the lubrication of steam cylinders over a wide range of operating conditions and steam quality.

Both grades are widely used as lubricants for gas compressors having separate cylinder lubrication. They are especially recommended where wet conditions exist in these cylinders.

Because of their compounding, both grades may be utilized in certain types of worm gear drives. Grade 400-5 falls into the category of AGMA 7 Compounded lubricant for worm gear service. Grade 680-7 may be used where AGMA 8 Compounded lubricant is required.

TYPICAL PROPERTIES:

CITGO CYLINDER OILS

Grade	**400-5**	**680-7**
Material Code	635017001	635023001
Gravity, ASTM D 4052, °API	27.1	22.1
Density, lb/gal at 60°F	7.43	7.67
Flash Point, COC, ASTM D 92, °F (°C)	585 (307)	555 (290)
Viscosity, ASTM D 445, cSt at 40°C	390	652
cSt at 100°C	28	40
ASTM D 2161, SUS at 100°F	2080	3392
SUS at 210°F	137	193
Viscosity Index, ASTM D 2270	98	102
Pour Point, ASTM D 97, °F (°C)	5 (-15)	5 (-15)
Color, ASTM D 1500	7	D8
Saponification No., ASTM D 94	10.7	14.7
Fatty Oil, %	5	7
Steam Emulsion Number, Seconds	1200+	1200+
AGMA Grade	7 Comp.	8 Comp.
ISO VG No.	–	680