



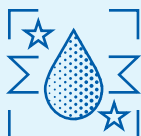
CITGO[®] Pacemaker[®] Gas Engine Oil 800 Series

OVERVIEW



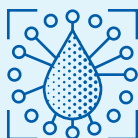
- Low ash/low phosphorus stationary natural gas engine oils formulated to provide maximum resistance to oxidation, corrosion, and foaming, and excellent antiwear performance.

FEATURES & BENEFITS



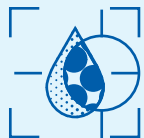
- Premium high viscosity index base stocks with low carbon residue to minimize carbon and varnish formation and maximize oil oxidation life.
- Contain no bright stock.
- Promote reduced spark plug deposits.
- Contain special detergent-dispersant additive package for excellent cleaning action to keep piston rings free in their grooves, thereby extending engine overhaul periods and engine life.
- Offer excellent resistance to nitration.
- Contain low phosphorous level; suitable for use with catalytic converter systems.
- Provide lower oil consumption and reduced maintenance costs.
- Provide excellent protection against corrosion of vital engine and compressor components.

APPLICATIONS



- Recommended primarily for use in the lubrication of spark-ignited, 4-cycle stationary natural gas engines and compressor cylinders.
- Recommended for high- and medium-speed naturally aspirated and turbo charged 4-cycle stationary engines manufactured by Caterpillar, Waukesha, Superior, Cooper-Bessemer; Cummins, Dresser-Rand (Categories I, II and III), as well as low-speed engines manufactured by Cooper-Bessemer and Worthington C4-Cycle.
- Low ash/low phosphorous formulation is suitable for use with catalytic converter systems.
- Suitable for use in compressor cylinder lubrication.

PROPERTIES



Typical Properties for CITGO Pacemaker Gas Engine Oil 800 Series:

Product Name	815	830	840
SAE Grade	15W-40	30	40
Material Code	632026001	632027001	632028001
Gravity, ASTM D4052, °API	30.6	29.3	29.3
Pounds Per Gallon	7.27	7.33	7.33
Flash Point, COC, ASTM D92, °F (°C)	446 (230)	446 (241)	511 (266)
Viscosity ASTM D445			
cSt at 40°C	96.7	89.2	125.1
cSt at 100°C	13.4	10.8	13.1
Viscosity Index, ASTM D2270	138	105	99
Pour Point, ASTM D97, °F (°C)	-27 (-33)	-27 (-33)	5 (-15)
Color, ASTM D1500	5.5	5.5	5.5
Carbon Residue, % (base stock)	0.02	0.02	0.02
Sulfated Ash, ASTM D874, m%	0.46	0.46	0.46
Total Acid No., ASTM D664, mg KOH/g	0.60	0.63	0.52
Total Base No., ASTM D2896, mg KOH/g	3.5	3.5	3.5
Phosphorus, ppm	280	280	280

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