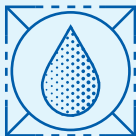




# CITGO<sup>®</sup> Pacemaker<sup>®</sup> Gas Engine Oil 1400 Series

## OVERVIEW



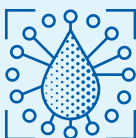
- Low ash/low phosphorus stationary natural gas engine oils formulated to provide maximum resistance to oxidation, corrosion, and foaming, and excellent antiwear performance.
- New generation oil delivers a superior level of cleanliness with excellent wear protection and a low ash formula that complies with manufacturers' warranties and non-selective catalytic convertor requirements.

## FEATURES & BENEFITS



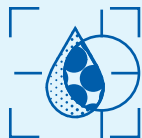
- Premium high viscosity index base stocks with low carbon residue to minimize carbon and varnish formation and maximize oil oxidation life.
- Contain no bright stock.
- Promote reduced spark plug deposits.
- Contain special detergent-dispersant additive package for excellent cleaning action to keep piston rings free in their grooves, thereby extending engine overhaul periods and engine life.
- Offer excellent resistance to oxidation and 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 natural gas engines such as those manufactured by Caterpillar and Waukesha.
- Low ash/low phosphorous formulation is suitable for use with catalytic converter systems.
- Consult equipment manufacturer for proper lubricant selection.

## PROPERTIES



## Typical Properties for CITGO Pacemaker Gas Engine Oil 1400 Series:

Product Name	1415	1430	1440
<b>SAE Grade</b>	<b>15W-40</b>	<b>30</b>	<b>40</b>
Material Code	632042001	632043001	632040001
Gravity, ASTM D4052, °API	31.2	30.7	30.5
Pounds Per Gallon	7.25	7.27	7.28
Flash Point COC, ASTM D92 °F (°C)	453 (234)	475 (246)	527 (275)
Viscosity ASTM D445			
cSt at 40°C	96.2	90.7	117.4
cSt at 100°C	13.8	11.3	13.4
Viscosity Index, ASTM D2270	141	112	111
Pour Point, ASTM D97, °F (°C)	-33 (-36)	-27 (-33)	-27 (-33)
Color, ASTM D1500	L2.5	L2.5	L2.5
Sulfated Ash, ASTM D874, m%	0.5	0.5	0.5
Total Base No., ASTM D2896, mg KOH/g	4.9	4.9	4.9
Total Acid No., ASTM D664, mg KOH/g	1.2	1.2	1.2
Phosphorus, ppm	250	250	250

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