



CITGO® Pacemaker® Gas Engine Oil 1700 Series

OVERVIEW



- Superior new-generation low ash, low phosphorus stationary natural gas engine oils with an advanced additive package that deliver a superior level of cleanliness and excellent wear protection for outstanding performance.
- Low ash formula complies with manufacturers' warranties and non-selective catalytic converter requirements.
- Rigorous field testing has proven superior protection against nitration and oxidation, plus resistance to viscosity increase, enabling longer drain intervals.

FEATURES & BENEFITS



- Formulated with the latest generation of additive technology and the highest-quality Group II base stocks.
- Contain special dispersants and detergents help ensure a cleaner, longer-running engine.
- Control deposits and minimize wear of pistons, rings, and liners.
- Retain TBN to neutralize combustion acids from sour gas.
- Contain a specialized combination of antioxidant and base oil to effectively inhibit oxidation and nitration in severe service.
- Control sludge that thickens the oil, plugs filters, and causes excessive foaming.
- Minimize valve recession to provide longer head life.

APPLICATIONS



- Suitable for a wide range of engines operating on virtually any variation of natural or synthetic gas, gas from digester or landfill sources, or fuels containing low levels of sulfur and chlorofluorocarbons (CFC). Note: In high-CFC/sour gas applications, an oil with a higher base reserve may be required.
- Recommended for high- and medium-speed 4-cycle engines manufactured by Caterpillar, Waukesha, Superior, Cooper-Bessemer, Cummins, Dresser-Rand (Categories I, II and III), and low-speed engines manufactured by Cooper Bessemer and Worthington C4-Cycle).
- CITGO Pacemaker Gas Engine Oil 1740 is a specially formulated SAE 40 grade product that exhibits superior low temperature properties, compared with other monograde oils. It is particularly well suited for applications where improved low temperature fluidity is needed, but a monograde oil is recommended by the engine manufacturer.

PROPERTIES**Typical Properties for CITGO Pacemaker Gas Engine Oil 1700 Series:**

Product Name	1715	1730	1740
SAE Grade	15W-40	30	40
Material Code	632075001	632073001	632074001
Gravity, ASTM D4052, °API	30.4	29.6	29.9
Pounds Per Gallon	7.28	7.32	7.30
Flash Point, COC, ASTM D92, °F (°C)	446 (230)	466 (241)	473 (245)
Viscosity ASTM D445			
cSt at 40°C	102.7	92	128.8
cSt at 100°C	13.7	11.0	13.6
Viscosity Index, ASTM D2270	133	104	101
Pour Point, ASTM D97, °F (°C)	-22 (-30)	-16 (-27)	-33 (-36)
Color, ASTM D1500	L6.0	L5.0	L5.0
Carbon Residue, % (base stock)	0.02	0.02	0.02
Sulfated Ash, ASTM D874, m%	0.45	0.45	0.45
Total Base No., ASTM D2896, mg KOH/g	5.0	5.0	5.0
Total Acid No., ASTM D664, mg KOH/g	0.75	0.66	0.67
Phosphorus, ppm	280	280	280

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