

**CITGO PACEMAKER® GAS ENGINE OIL
1200 SERIES**

Date 01/10

DESCRIPTION: CITGO Pacemaker Gas Engine Oil 1200 Series oils are premium quality, ashless gas engine oils fortified with a latest generation ashless dispersant additive package in combination with corrosion, oxidation and foam inhibitors, and a premium antiwear additive package. They provide excellent performance in 2-cycle engines and also provide superior service in many 4-cycle engines.

- QUALITIES:**
- The use of high viscosity index base stocks with low carbon residue minimizes carbon and varnish formation and serves to provide maximum oxidation resistance.
 - Contain no bright stock.
 - Provide superior protection against ring belt and port deposits in 2-cycle engines.
 - Use ashless formulation minimizes spark plug fouling.
 - Are highly dispersant, which provides excellent engine cleanliness. By keeping piston rings free in their grooves, extended engine overhaul periods and engine life can be achieved.
 - Offer excellent resistance to oil nitration and oxidation.
 - Promote lower oil consumption, fewer deposits and reduced maintenance costs.
 - Provide superior corrosion protection to vital engine and compressor components.

APPLICATIONS: CITGO Pacemaker Gas Engine Oil 1200 Series oils provide superior antiwear protection, varnish and deposit control in naturally aspirated and turbocharged 2-cycle and 4-cycle gas engines.

These products meet the performance characteristics required for Dresser-Rand Categories I and II gas engines as well as other 2- and 4-cycle units of major equipment manufacturers requiring ashless type oils.

These premium qualities make CITGO Pacemaker Gas Engine Oil 1200 Series the best choice for universal ashless gas engine oils in a wide variety of low- and high-speed 2- and 4-cycle engines.

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TYPICAL PROPERTIES:

CITGO PACEMAKER® GAS ENGINE OIL 1200 SERIES

Product Name	1215	1230	1240
SAE Grade	15W-40	30	40
Material Code	632037001	632035001	632036001
Gravity, ASTM D 4052, °API	30.8	30.0	29.6
Pounds Per Gallon	7.26	7.3	7.31
Flash Point, COC, ASTM D 92, °F (°C), Min.	482 (250)	496 (258)	543 (284)
Fire Point, COC, ASTM D 92, °F (°C), Min.	514 (268)	518 (270)	576 (302)
Viscosity, ASTM D 445, cSt at 40°C	107	91	126
cSt at 100°C	13.8	10.8	13.2
ASTM D 2161, SUS at 100°F	550	473	689
SUS at 210°F	74	63	73
Viscosity Index, ASTM D 2270	128	102	98
Pour Point, ASTM D 97, °F (°C)	-17 (-27)	+15 (-9)	+10 (-12)
Color, ASTM D 1500	L2.0	L2.5	L3.0
Carbon Residue, % (base stock)	0.02	0.02	0.02
Total Base No., ASTM D 2896	1.2	1.2	1.2
Phosphorus, ppm	500	500	600
Oxidation Inhibitor	Yes	Yes	Yes
Corrosion Inhibitor	Yes	Yes	Yes
Dispersant	Yes	Yes	Yes
Antiscuff/Antiwear	Yes	Yes	Yes