

Heavy Duty Low-Ash Gas Engine Oil

■ Superior Lubrication for Natural Gas Fueled Engines

SWEPCO 304 Heavy Duty Low-Ash Gas Engine Oil is a premium quality, low ash, extended service engine oil especially formulated to provide superior performance in natural gas fueled engines. It is carefully balanced to exceed API CF quality performance and nonselective catalytic converter requirements.

Changes in the natural gas engine industry have placed greater demands on engine oils and shifted the emphasis from ashless to ash-containing oils. These changes include stricter emission regulations, a growing number of 4-cycle engines and new engine designs. SWEPCO 304 meets the challenge by offering unparalleled nitration and oxidation resistance, better piston deposit control and excellent scuff resistance for maximum engine and oil life.

SWEPCO 304 is carefully formulated from the very finest high VI paraffinic base stocks available and the most advanced additive chemistry.

SWEPCO 304 resists oxidation, nitration and port plugging deposits, making it especially well suited for all gas engine applications where the engine manufacturer recommends the use of low-ash gas engine oils.

SWEPCO 304 saves you money through overall reduced lubrication cost, including fuel conservation,



SWEPCO 304 is especially formulated to meet the unique requirements of natural gas fueled engines.

reduction of waste, reduced maintenance costs and extension of equipment and oil life.

SWEPCO 304 at work

- Meets Dresser-Rand Category III and API CF
- Specifically designed for Caterpillar, Waukesha and other high-output, highly-turbocharged natural gas engines
- Digester Applications
- Cogeneration Plants
- Landfill Applications
- Stationary Applications
- Agriculture
- Compressors
- 2-Cycle/4-Cycle Engines
- <300 ppm Phosphorous meets most catalyst manufacturers' requirements

Feature	Benefit
High VI Paraffinic Base Stock	• Gives a more uniform viscosity over a wide temperature range • Helps improve high temperature oxidation and thermal stability • Better low temperature flow characteristics help reduce start-up wear • Extends service life
Oxidation Inhibitor	• Reduces oil thickening and formation of acids to extend oil service life • Helps prevent sludge, varnish and carbon deposits that result from oxidation/ nitration • Keeps engines cleaner and extends overhaul periods
Rust and Corrosion Inhibitor	• Builds a chemical bond with the surface to keep moisture and acids from penetrating and attacking the surfaces • Unsurpassed protection from sulfuric acids and corrosion created by digester fuels containing hydrogen sulfide (H₂S)
Anti-Foam Additive	• Maintains a continuous oil film to prevent wear and assist in cooling
Oiliness Additive	• Enables the oil to penetrate the surface for better lubrication
Anti-Wear Inhibitor	• Helps prevent friction and wear • Protects against valve train wear & scuffing of cylinder bore and piston rings • Extends overhaul periods and reduces maintenance cost
Detergent Additive	• Helps keep engine parts clean and neutralizes acids formed during combustion • Minimizes port blocking in 2-cycle engines • Minimizes ring zone deposits, helping to reduce ring and liner wear
Dispersant Additive	• Helps keep solid contaminants in the oil in colloidal suspension, preventing sludge and varnish deposits on engine parts
Pour Point Depressant Additive	• Gives the oil better low temperature flow characteristics • Helps to reduce low temperature start-up wear
Viscosity Index Improver Additive	• Less high temperature thinning and low temperature thickening
Long Life	• Works harder for a longer period of time thus easing the cost and worries about waste oil disposal
Multi-Purpose Formulation	• Exceeds requirements of all types and models of natural gas engines • Reduces inventory and lubrication errors to save you money
LabTec SM Fluid Analysis Program	• Can maximize the life of the equipment and the life of the lubricant, while pinpointing impending problems • "Fingerprints" oxidation and nitration levels • Reduces waste
The Bottom Line	• Extends the life of your expensive equipment • Reduces waste disposal • Increases the service life of the oil • Reduces labor cost through decreased and simplified maintenance • Reduces costly scheduled and unscheduled downtime • Multi-purpose formulation that reduces inventory and lubrication errors

Typical Physical Properties

SAE Grade	40
Density, @ 60°, lbs/gal	7.35
Density, @ 60°, kg/l	0.88
Viscosity, cSt @ 40°C	151
Viscosity, cSt @ 100°C	15.0
Viscosity Index	100
Flash Point, °F (°C)	480 (248)
Pour Point, °F (°C)	-6 (-21)
Color	Dark Amber

Typical Chemical Properties

Calcium, wt %	0.12
Zinc, wt %	0.03
Phosphorous, wt %	0.03
Nitrogen, wt %	0.09
Sulfated Ash, wt %	0.45
Total Base No	5.1

Applicable Specifications

- API CF
- Waukesha Cogeneration Requirements
- Dresser Rand Category III
- Low-Ash and Low-Phosphorous Requirements
- G7-17 Natural Gas Laboratory Engine Tests
- CRC L-38 Corrosion Test
- Caterpillar 1G-2 and IM-PC Piston Deposit Control
- NSCR - type exhaust catalysts requirements

Specifically Recommended For

- Superior • Caterpillar • Waukesha • Jenbacher
- Dresser-Rand • Man



A Product of SPX Technology™.

... the cutting edge performance SWEPCO Customers have come to expect.



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