



El Mar 3000

Conoco El Mar 3000 oil is a high-quality, low-ash, dispersant-detergent gas engine oils designed for use in 4-stroke cycle engines fueled by natural gas or LPG. It is specially formulated to combat the harmful byproducts formed by combustion of gaseous fuels. It is recommended for use in stationary gas engines whose manufacturers specify a low-ash oil providing API CD level performance. El Mar 3000 is formulated from high-viscosity, index base oils and field-proven additives to meet the rigorous lubrication demands of modern, fuel efficient, low-emission gas engines. El Mar 3000 offers outstanding engine protection by reducing carbon and lacquer deposits, preventing sludge buildup, and minimizing corrosion and wear.

Applications

El Mar 3000 is recommended for use in turbocharged, lean-burn and naturally aspirated gas engines requiring a low-ash engine oil. Engines operating in this type of service are commonly found in crude oil and gas transmission pipelines, electrical power generators, gas compressors, irrigation water pumps and well drilling rigs. El Mar 3000 is recommended for use in natural gas engines manufactured by:

- Caterpillar (3500 series engines and smaller)
- Climax
- Colt-Fairbanks Morse
 - 2-Stroke Cycle, Natural Gas
 - 4-Stroke Cycle, Dual-Fuel
- Cooper Bessemer, 4-Stroke Cycle
- Cooper Superior, Spark Ignition
- Dresser Rand
- Ruston
- Minneapolis Moline
- Nordberg
- Waukesha
 - VR, VGF, VHP, VSG and ATGL Series
 - Clinton/Intermediate Series F817G, F1197G, H2476G, L3712G
- Wartsila
- Worthington, 4-Stroke Cycle

**Low-Ash, Natural
Gas Engine Oil**

**U.S. Technical
Services Hot line:
1-800-255-9556**

**U.S. Customer
Service:
1-800-640-1956**

**International:
+1-832-486-3363**

**Asia-Pacific:
tel: (65) 6536-0010
fax: (65) 6536-0012**

**E-mail address:
*conocolubricants@
conocophillips.com***

www.lubes.conoco.com

600 N. Dairy Ashford • 2W9000 • Houston, TX 77079



Outstanding Features

- Low-ash formulation reduces deposits in ports, spark plugs and combustion chamber
- Good resistance to oxidation and nitration
- Excellent antiwear protection for reduced ring and liner wear
- Excellent protection against valve stem deposits and valve seat recession
- Compatible with units equipped with catalytic converters for emission control
- Extended cylinder head and spark plug life

EI Mar 3000 Typical Properties

SAE Grade	30	40	15W-40
Viscosity,			
cSt @ 40°C	94.8	135	104
cSt @ 100°C	10.8	13.8	14.2
SUS @ 100°F	494	708	534
SUS @ 210°F	63.2	74.8	76.3
Viscosity Index	97	98	140
Ash, Sulfated, ASTM D874, wt %	0.47	0.47	0.47
Pour Point, °C (°F)	-20 (-4)	-18 (0)	-32 (-26)
Flash Point (COC), °C (°F)	250 (482)	266 (511)	236 (457)
Density, g/cm ³ @ 15°C (60°F)	0.886	0.888	0.883
Total Base Number, ASTM D2896	5.4	5.4	5.4
Color, ASTM	2.5	3.0	2.5
High Temperature/High Shear Viscosity, 150 °C, cP	3.2	4.0	3.7
Viscosity, Cold Cranking (CCS), cP @ °C	—	—	5,350 (-20)
Phosphorus, ppm	310	310	310
Zinc, ppm	330	330	330

Due to continual product research and development, the information contained herein is subject to change without notification.

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