



## El Mar Ashless Heavy Duty

Conoco El Mar Ashless Heavy Duty is an ashless gas engine oil formulated from high-quality, paraffinic base stocks, and dispersant-type, ashless technology. It is specifically formulated to meet the requirements of less severe, naturally aspirated and turbocharged, 2-stroke cycle engines. El Mar Ashless Heavy Duty is free of ash-forming additives and provides exceptionally clean intake ports in 2-stroke cycle engines, as well as extended spark plug life for all spark-ignited gas engines.

### **Applications**

El Mar Ashless Heavy Duty is recommended for use in 2-stroke cycle natural gas engines whose manufacturers recommend an ashless natural gas engine oil. Engines operating in this type of service are commonly found in crude oil and natural gas transmission pipelines, electrical power generators, gas compressors, irrigation water pumps and well drilling rigs.

El Mar Ashless Heavy Duty meets or exceeds the requirements of the following natural gas engine manufacturers:

- Ajax
- Clark
- Climax
- Colt-Fairbanks Morse, 2-Stroke Cycle
- Cooper-Bessemer, 2-Stroke Cycle
- International Harvester, 2-Stroke Cycle
- Worthington, Loop and Uniflow, 2-Stroke Cycle

**Ashless Natural  
Gas Engine Oil**

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### **Outstanding Features**

- Very good piston ring groove and crankcase cleanliness
- Ashless additive chemistry to minimize port deposits
- Good oxidation and nitration control and thermal stability
- Good wear protection for pistons, liners and bearings
- Protects against scuffing and wear

### **El Mar Ashless Heavy Duty Typical Properties**

<b>SAE Grade</b>	<b>30</b>	<b>40</b>	<b>15W-40</b>
Viscosity,			
cSt @ 40°C	90.6	130.5	107
cSt @ 100°C	10.7	13.8	14.3
SUS @ 100°F	471	682	551
SUS @ 210°F	62.8	74.8	76.7
Viscosity Index	102	102	137
Ash, Sulfated, ASTM D874, wt %	<0.01	<0.01	<0.01
Pour Point, °C (°F)	-24 (-11)	-18 (0)	-33 (-27)
Flash Point (COC), °C (°F)	254 (490)	274 (525)	232 (450)
Density, g/cm <sup>3</sup> @ 15°C	0.886	0.888	0.879
Total Base Number, ASTM D2896	1.0	1.0	1.0
Color, ASTM	2.0	2.0	2.0
High Temperature/High Shear Viscosity, 150 °C, cP	3.3	3.9	3.8
Viscosity, Cold Cranking (CCS), cP @ °C	—	—	6075 (-20°C)
Phosphorus, ppm	540	540	540

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

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