

# Mobil Pegasus 610

## Gas Engine Oil

### Product Description

Mobil Pegasus 610 is a high performance natural gas engine oil primarily intended for the lubrication of modern medium and high speed four-cycle engines operating on fuel that contains corrosive materials such as hydrogen sulphide or halogens (compounds containing chlorine, fluorine, etc.). These engines are generally of the lean-burn design where increased manifold pressures prevent sufficient lubricant from reaching the valve guide areas resulting in low oil consumption which can lead to accelerated valve guide and valve recession. This effect also increases the potential for wear and acid attack of upper cylinder components from the acidic materials generated during combustion. The Mobil Pegasus 610 is a 1.0% ash, high TBN gas engine oil with exceptional reserve alkalinity designed to offset the negative effects of these corrosive materials on engine components. The excellent corrosion protection properties prevent corrosive wear in cylinders, valve areas and bearings which can result in longer engine life and lower maintenance costs. Mobil Pegasus 610 provides excellent anti-wear and anti-scuff performance assuring minimal piston scuffing, scoring and cylinder and ring wear. This oil can also be used for the lubrication of the reciprocating compressors in landfill and biomass gas applications. Mobil Pegasus 610 is formulated from high quality mineral base oils combined with an advanced technology 1.0% ash additive system designed to provide excellent protection of engine and compressor components. This product exhibits a high level of chemical stability and resistance to oxidation and nitration. Mobil Pegasus 610 offers outstanding resistance to valve train wear and protection against deposit and sludge formation. These performance advantages combined with the very effective detergency and dispersancy characteristics control the formation of ash and carbon deposits that could result in poor engine performance and detonation.

### Features and Benefits

Mobil Pegasus 610 Gas Engine Oil provides an additional margin of protection in those applications using contaminated fuel. Its excellent detergent / dispersant technology also results in cleaner engines, lower wear rates and improved engine performance. The use of this product can result in reduced maintenance costs and improved production capacity. Its excellent chemical and oxidation stability can result in longer drain periods and reduced filter costs. The high reserve alkalinity of this product allows its use in engines operating on fuels with moderate amounts of corrosive materials in the fuel gas.

| Features  | Advantages and Potential Benefits  |
|---|--|
| High TBN and Reserve Alkalinity                 | Controls wear and corrosion when using contaminated gas<br>Protects valve seats and faces on four-cycle engines<br>Controls combustion chamber ash formation and improves spark plug performance |
| Outstanding Anti-wear and Anti-scuff Properties | Lower wear of engine components<br>Reduced scuffing of liners in highly loaded gas engines<br>Provides excellent break-in protection   |
| Excellent Oxidation and Chemical Stability      | Cleaner engines<br>Extended oil drain intervals<br>Reduced oil filter costs<br>Excellent resistance to oxidation and nitration   |
| Effective Corrosion Resistance                  | Reduces valve guide wear in four-cycle gas engines<br>Protects bearings and internal components  |



| Features                                      | Advantages and Potential Benefits   |
|---|---|
| Exceptional Detergent / Dispersant Properties | Neutralises formation of acids in the oilProtection of upper cylinder and valve train componentsCleaner enginesLonger oil filter life |
| Non-zinc and Non-Phosphorus Formulation       | Extend catalytic converter life and performance   |

## Applications

Note : Engines operating on fuel gas with elevated levels of sulphur or chlorine compounds should also have coolant (jacket water) and oil temperatures raised.

- Gas engines operating on fuel that contains moderate levels of hydrogen sulphide (H<sub>2</sub>S)
- Engines operating on fuel containing other corrosive components such as TOHCl (Total Organic Halides as Chloride)
- Spark ignited four-stroke cycle gas engines with very low oil consumption
- Reciprocating compressors operating on natural gas that contains sulphur or halogens
- High output or naturally aspirated engines operating at or in excess of rated capacity under high temperatures

## Specifications and Approvals

**Mobil Pegasus 610 has the following builder approval:**

Waukesha for use in Landfill

## Typical Properties

| <b>Mobil Pegasus 610</b>             |      |
|--------------------------------------|------|
| SAE Grade                            | 40   |
| Viscosity, ASTM D 445                |      |
| cSt @ 40° C                          | 130  |
| cSt @ 100° C                         | 13.8 |
| Viscosity Index, ASTM D 2270         | 102  |
| Sulfated Ash, wt%, ASTM D 874        | 0.98 |
| TBN #, mg KOH/g, ASTM D 2896         | 8.6  |
| Pour Point, °C, ASTM D 97            | -18  |
| Flash Point, °C, ASTM D 92           | 264  |
| Density @ 15.6° C, ASTM D 4052, kg/L | 0.89 |

## Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product



should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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