



Mobil Pegasus™ 610

Mobil Industrial , Ireland

GAS ENGINE OIL

Product Description

Mobil Pegasus™ 610 is a high performance 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 turbo charged 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 biomas 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 Protects valve seats and faces on four-cycle engines Controls combustion chamber ash formation and improves spark plug performance
Outstanding Anti-wear and Anti-scuff Properties	Lower wear of engine components Reduced scuffing of liners in highly loaded gas engines Provides excellent break-in protection
Excellent Oxidation and Chemical Stability	Cleaner engines Extended oil drain intervals Reduced oil filter costs Excellent resistance to oxidation and nitration
Effective Corrosion Resistance	Reduces valve guide wear in four-cycle gas engines Protects bearings and internal components
Exceptional Detergent / Dispersant Properties	Neutralises formation of acids in the oil Protection of upper cylinder and valve train components Cleaner engines

Features	Advantages and Potential Benefits
	Longer oil filter life
Non-Zinc and Non-Phosphorus Formulation	Extend catalytic converter life and performance

Applications

- Gas engines operating on fuel that contains moderate levels of hydrogen sulphide (H₂S)
- Engines operating on fuel containing other corrosive components such as TOHCl (Total Organic Halides as Chloride), landfill or biomass gases
- 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

This product has the following approvals:
INNIO Jenbacher TI 1000-1109 (Class C fuel gas, Type 2 & 3)
INNIO Waukesha Engine Landfill Gas Applications
MAN M 3271-4
Rolls-Royce Solutions Augsburg (former MTU Onsite Energy) Gas Engines Series 400 - all engines with biogas, sewage gas and landfill gas
GUASCOR All non natural gas engine model types (except 86EM and 100EM)

Properties and Specifications

Property	
Grade	SAE 40
Base Number - Xylene/Acetic Acid, mg KOH/g, ASTM D2896 (*)	11.1
Pour Point, °C, ASTM D97	-18
Ash, Sulfated, mass%, ASTM D874	1.0
Flash Point, Cleveland Open Cup, °C, ASTM D92	257
Viscosity Index, ASTM D2270	98
Kinematic Viscosity @ 40 C, mm ² /s, ASTM D445	131
Kinematic Viscosity @ 100 C, mm ² /s, ASTM D445	13.3
Density 15 C, kg/L, CALCULATED	0.888

(*) use of other ASTM approved solvents may yield different results

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.aspx>

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06-2024

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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