



Mobil Pegasus™ 605

Mobil Industrial , Guyana

Gas Engine Oil

Product Description

Mobil Pegasus™ 605 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 valve guide wear and valve recession. This effect also increases the potential for wear and acid attack of upper cylinder components from the corrosive materials generated during combustion. The Mobil Pegasus 605 is a 0.5% ash gas engine oil with exceptional reserve alkalinity designed to offset the negative effects of acidic materials on engine components. The excellent corrosion protection properties helps prevent corrosive wear in cylinders, valve areas and bearings which can result in longer engine life and lower maintenance costs. Mobil Pegasus 605 provides excellent anti-wear and anti-scuff performance which helps assure minimal piston scuffing, scoring and low cylinder liner and piston ring wear. This oil can also be used for the lubrication of the reciprocating compressors in landfill and biomass gas applications.

Mobil Pegasus 605 is formulated from high quality mineral base oils combined with an advanced technology, low 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. Pegasus 605 offers outstanding resistance to valve train wear and protection against deposit formation. These performance advantages combined with the very effective detergency and dispersancy characteristics helps control the formation of ash and carbon deposits that could result in poor engine performance and detonation. This product also compatible for use in gas engines equipped with catalytic converters.

Features and Benefits

Mobil Pegasus 605 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 low to moderate amounts of corrosive materials in the fuel gas.

Features	Advantages and Potential Benefits
Optimised 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 drain intervals Reduced 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 filter life
Non-zinc and Non-phosphorus Formulation	Improves catalytic converter performance and longer life

Applications

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

- Gas engines operating on fuel that contains moderate levels of hydrogen sulphide (H₂S)
- Engines operating on fuel containing other corrosive materials such as TOHCl (Total Organic Halides as Chloride) such as landfill or biomass gas
- Spark ignited four-cycle gas engines with very low lube oil consumption
- Medium and high speed four-cycle engines equipped with catalytic converters requiring a low ash gas engine oil
- Engines experiencing valve train wear and corrosion
- Reciprocating compressors operating on natural gas that contains sulphur or chlorine compounds
- 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 Waukesha Engine Landfill Gas Applications
Caterpillar Energy Solutions TR 2105, Lube Oils for Gas Engines (CG132, CG170, CG260)
Rolls-Royce Solutions Augsburg (former MTU Onsite Energy) Gas Engines Series 400 - all engines with natural gas and propane gas
MWM TR 0199-99-2105, Lube Oils for Gas Engines

This product meets or exceeds the requirements of:
Caterpillar

Properties and Specifications

Property	
Grade	SAE 40
Kinematic Viscosity @ 100 C, mm ² /s, ASTM D445	13.2
Kinematic Viscosity @ 40 C, mm ² /s, ASTM D445	124
Viscosity Index, ASTM D2270	100
Ash, Sulfated, mass%, ASTM D874	0.5
Base Number - Xylene/Acetic Acid, mg KOH/g, ASTM D2896 (*)	7.0

Property	
Pour Point, °C, ASTM D97	-15
Flash Point, Cleveland Open Cup, °C, ASTM D92	262
Density 15.6 C, lb/gal, CALCULATED	0.890

(*) 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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