Mobil Pegasus 805 oil for gas engines

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History of Mobil

Mobil Company — one of the largest and oldest oil and gas corporations in the USA, originating from Vacuum Oil, founded in 1866, and Standard Oil of New York (Socony). In 1931, these companies merged into Socony-Vacuum, in 1955 rebranded as Socony Mobil Oil Company, and in 1966 became Mobil Oil Corporation. In 1999, it merged with Exxon, and today the Mobil brand is part of ExxonMobil, keeping its trade name and the legendary red winged horse logo — Pegasus, symbolizing quality and reliability of lubricants.
The Mobil Pegasus gas oil line was launched in the early 2000s and became a benchmark in its category. Mobil Pegasus 805 oil appeared as an intermediate solution, combining high performance with economical cost, designed for engines running on gas under medium and increased loads. Unlike newer models (e.g., Pegasus 1005), 805 has enhanced TBN and improved protection against corrosion and acid attack, important for engines operating in challenging conditions.

Mobil Pegasus 805 Terms

TDS (Technical Data Sheet) — a technical passport of the product, including detailed oil parameters such as viscosity, TBN, density, flash point, and other specifications officially provided by the manufacturer.

SDS (Safety Data Sheet) — safety data sheet containing information on precautions when using, storing, and transporting the product, required by international standards.

Viscosity — a property of the oil showing its resistance to flow at certain temperatures (usually 40 °C and 100 °C), important for evaluating lubrication efficiency at operating temperatures.

TBN (Total Base Number) — the ability of the oil to neutralize acids formed during gas combustion. Higher TBN means the oil maintains protective properties longer in aggressive conditions.

Chlorinated additive (%) — the percentage of chlorine in the oil providing anti-corrosion protection and improved wear resistance for gas engines.

Oxidation stability — the ability of the oil to resist oxidation and decomposition under oxygen and heat exposure, ensuring longer oil life and engine cleanliness.

Nitration resistance — the oil's resistance to forming nitrate deposits, which can impair engine performance and reduce oil life.

Oil drain interval — the recommended period between oil changes. Longer intervals save money and maintenance effort.

Long-life formula — oils designed specifically for extended change intervals.

OEM (Original Equipment Manufacturer) — approvals from original engine manufacturers, ensuring compliance with equipment requirements.

Mobil Pegasus 805 Specifications

Parameter	Value	Description
Grade	SAE 40	Oil viscosity designation according to SAE (Society of Automotive Engineers). This classification only defines viscosity, not engine type, additive content, or oil quality level.
Kinematic viscosity at 40 °C	130 mm²/s	Oil viscosity at operating temperature, indicating thickness and flowability. Test method ASTM D445.
Kinematic viscosity at 100 °C	13.5 mm²/s	Viscosity at high temperature, important for stable operation under high load. Test method ASTM D445.
Viscosity index	99	Shows the stability of oil viscosity with temperature changes. Higher value means better stability. Test method ASTM D2270.
Flash point, Cleveland open cup	262 °C	The temperature at which oil vapors ignite. Important for operational safety. Test method ASTM D92.
Pour point	-12 °C	The minimum temperature at which the oil remains fluid and does not solidify. Test method ASTM D97.
Density at 15 °C (g/cm³)	0.89 kg/l	Mass per unit volume of oil. Test method ASTM D4052.
TBN	6.4 mg KOH/g	Elevated TBN for enhanced acid protection. Test method ASTM D2896.
Chlorination	≈ 0.5 %	Chlorine content for improved wear and corrosion protection. Specific to oil formulation (not standardized).

Sulfated ash	0.5 wt.%	Amount of mineral residues remaining after oil combustion. Test method ASTM D874.
Evaporation (NOACK %)	≈ 14 %	Oil loss at high temperature, lower values are better.
Nitration & oxidation stability	High	Oil resists nitration and oxidation, prolonging service life.



Mobil Pegasus 805 Oil

Pegasus Oil Technical Comparison

Model	TBN	Chlorine (%)	Oil Change Interval	Application	Usage
Pegasus 705	≈ 5.7	≈ 0.5	standard	Older engines, budget solution	basic protection
Pegasus 805	≈ 6.4	≈ 0.5	increased ~2×	Medium requirements for corrosion and acid resistance	corrosion & acid protection
Pegasus 1005	≈ 5.4	≈ 0.5	2–3× longer than standard	Modern engines with low emissions	wear resistance, nitration, long service life

Conclusion: Mobil Pegasus 805 is recommended when enhanced acid and corrosion protection is required with moderate oil change intervals. Suitable for gas engines with varying fuel quality, where engine cleanliness and reliability are important.

Mobil Pegasus 805 Applications

Pegasus 805 is recommended by gas engine manufacturers:

- Jenbacher (including GE J316, J420 series, etc.)
- MWM (Motoren-Werke Mannheim)
- Caterpillar G-series
- Waukesha
- Other engines running on natural, biogas, and treated gas.

The oil manufacturer strongly recommends using Mobil Pegasus 805 only if corresponding OEM approvals and specifications exist, as incorrect oil choice can lead to increased wear and voiding of equipment warranty.

How to choose oil for gas engines?

Determine engine type: OEM specifications (e.g., MWM PTR, Jenbacher NG-, CAT G-series, etc.)
Check requirements: acceptable TBN, chlorination, viscosity, exhaust system compatibility.
Consult TDS: the technical sheet contains full data — TBN, ash, density, compatibility, and OEM approvals. Consider fuel quality (gas): if high acidity, higher TBN is needed. If within normal range, focus on nitration resistance and component protection. Conduct used oil analysis (IR, TBN, nitration, oxidation) every 1000–2000 operating hours to accurately adjust oil change intervals.

Additional steps

Save product specifications (TDS Technical Data Sheet) Pegasus 805 from the official Mobil website or distributors.
Check Safety Data Sheet (SDS) for physicochemical information — flash point, density, substance compatibility.

Specifications and TDS Approvals

- Caterpillar Energy Solutions TR 2105, lubricants for gas engines (CG132, CG170, CG260)
- INNIO Jenbacher TI 1000-1109 (Class A fuel gas, types 2, 3, 4 & 6)
- INNIO Jenbacher TI 1000-1109 (Class B fuel gas, Type 4 & 6)

- INNIO Waukesha Engine 220GL, engines for plants running on pipeline gas
- INNIO Waukesha Engine, engines for co-generation and compression plants running on pipeline gas
- Everllence (formerly MAN Energy Solutions) four-stroke LNG engines
- MTU Gas Engines S4000 L32, L33 natural gas engines
- MWM TR 0199-99-2105, lubricants for gas engines
- Perkins GAS ENGINE OIL - NATURAL GAS
- Wartsila 220SG
- Wartsila 28SG
- Wartsila 32DF
- Wartsila 34SG
- Rolls-Royce Solutions Augsburg (formerly MTU Onsite Energy) Gas Engines Series 400 - all engines running on natural gas and propane
- INNIO Jenbacher TI 1000-1109 (Class C fuel gas, types 4A, 4B, 4C)
- MTU Gas Engines S4000 L61, L62, L63 using natural gas

This product is recommended where API CF is required.
Also meets DIN 51507 specifications (for gas engines), where applicable.

Mobil Pegasus 805 Safety Data Sheet (SDS)
pasport_bezopasnosti_msds_mobil_pegasus_805.pdf

Mobil Pegasus 805 Product Data Sheet (PDS)
pasporta_produkta_pds_gl_xx_mobil_pegasus_805_en.pdf

Occupational Safety and Health
Check the official manufacturer document and recommendations for Mobil Pegasus 805 by opening file 201525106010.pdf or http://www.msds.exxonmobil.com/psims/psims.aspx.
In "Material" enter the oil model "Pegasus 805" (Contains)
In "Manufacturer" enter "ExxonMobil" (Contains)
In "Product Code" enter "201525106010" and leave "Sort By" as default "Material"

Mobil Pegasus 805 is available for purchase in the online store.