

## PETRONAS GEO SYN

### Supreme Performance Natural Gas Engine Oil

PETRONAS Geo SYN is a supreme performance natural gas engine oil specially developed for the lubrication of a wide range of spark-ignited natural gas-fuelled Aluminum & Steel piston engines in order to improve fuel-efficiency and reduce emissions.

Formulated with high quality selected semisynthetic base oils (the first Gas Engine Oil formulated with PETRONAS ETRO Plus base oil technology) enhanced with advanced anti-wear, anti-oxidant, detergent, dispersant, anti-rust and anti-foam additives, PETRONAS Geo SYN 40 oil provides excellent piston deposit, sludge and ash control, excellent TBN retention and thermal stability as well as resistance to oxidation/nitration.

PETRONAS Geo SYN oil is approved for latest INNIO Jenbacher Aluminum & Steel piston.

#### Applications

PETRONAS Geo SYN oil is recommended for use in:

- INNIO Jenbacher J624 2-stage turbocharged gas engine
- Aluminum & Steel piston gas engines
- medium to high speed four-cycle engines requiring a low ash oil
- engines experiencing valve face and seat wear
- lean-burn and stoichiometric four-cycle engines
- applications using Natural Gas fuels containing low levels of sulfur or chlorine

#### Features and Benefits

Features	Benefits		
Excellent TBN retention	Excellent base number retention throughout the oil life		
Free of TPP (Tetra Propenyl Phenol)	Environmental compliance with emission limits		
Excellent resistance to sludging	Excellent piston and engine cleanliness for long, efficient operation and reduced overhaul costs		
High anti-wear and anti-scuff protection	Protects engine from excessive wear and scuffing, providing long engine life		
Excellent detergent and dispersant performance	Protects valve train components, reduces ash and carbon deposits on pistons and combustion chambers		
Excellent oxidation and nitration stability	Due to the presence of PETRONAS ETRO Plus base oil it provides excellent oxidation and nitration resistance minimize oil thickening particularly under liner air/fuel and maintains oil filter efficiency		
High rust & corrosion protection	Inhibits the corrosion process that occurs in presence of acid formation, improving engine life		
High foam stability	High efficiency in avoiding foam formation		

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#### **Typical Properties**

Characteristic	Method	Specification	SAE 40
Specific Gravity @15°C	ASTM D 4052	(1)	0,875
Kinematic Viscosity at 40°C, cSt	ASTM D 445	(1)	118,3
Kinematic Viscosity at 100°C, cSt	ASTM D 445	(1)	13,55
Viscosity Index	ASTM D 2270	(1)	111
Flash Point, °C	ASTM D 92	(1)	250
Pour Point, °C	ASTM D 97	(1)	-36
TAN, mgKOH/g	ASTM D 664	(1)	1,1
TBN, mgKOH/g	ASTM D2896	(1)	7,0
Sulphated Ash, %	ASTM D874	(1)	0,54
Foam Sequence I, mL	ASTM D 892	(1)	0/0

All technical data are provided for reference only / (1): not required in specification / SS is available upon request including quality control limits

#### Performance Levels

• INNIO Jenbacher Class A, Type 2, 3, 4 and 6 engines

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#### Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: <u>www.pli-petronas.com</u>.

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