

NGLA 40

High Performance Low Ash Natural Gas Engine Oil

Description

Nemco's NGLA 40 is a Low Ash, SAE 40 Natural Gas Engine Oil (NGEO) that is designed for use in modern 4-stroke stationary engines fueled by natural gas. Recommended for use in gas compression, well gathering, power generation, Co-Gen, Landfill and Bio Gas applications.

Nemco NGLA 40 uses the highest quality Group II base oils and a state-of-the-art additive package with proven performance in naturally aspirated, turbocharged, and lean burn engines. Nemco's NGLA 40 has successfully completed extensive field trials in Caterpillar and GE Jenbacher engines in severe co-generation service.

Advantages

- Low Sulphated Ash (0.50 wt %)
- Enhanced varnish and deposit protection at very high temperatures
- Lower deposits in combustion chamber resulting in reduced oil consumption
- Lower levels (< 335 ppm) of Zinc and Phosphorus to protect catalytic converters

- Improved copper corrosion protection
- Minimized valve seat recession
- Increased overhaul intervals
- API CF level performance

Suitable/Recommended for

- Caterpillar (including CAT 3600 and 3500 series engines)
- Cummins
- Dresser Rand
- Guascor
- Jenbacher (official approval in GE Jenbacher TA 1000-1109, Type 2, 3 and 4 engines)
- MAN Diesel & Turbo 4T
- MTU
- MWM
- Niigata
- Wartsila 4T
- Waukesha

Typical Characteristics - NGLA 40

Test	Method	Result
SAE Grade	-	40
Kinematic Vis@40°C mm ² /s	ASTM D445	139
Kinematic Vis@100°C mm ² /s	ASTM D445	15.3
Viscosity Index	ASTM D2270	113
Flash Point, (COC) °C(°F)	ASTM D92	215(419)
Pour Point, °C(°F)	ASTM D97	-23(-10)
TBN, mg KOH/g	ASTM D2896	5.6
Sulfated Ash, mass %	ASTM D874	0.50

These characteristics are typical of current production, variations in these characteristics may occur.

Availability and product codes

Pack size	20L pail	205L drum	1,000 tote/Bulk
NGLA 40	DMORZ0057	DMORZ0096	Special Order
Availability	To order, contact us toll free at 855.755.6737 or orderdesk@nemco.ca		

Use and Storage

To get the best performance from your equipment ensure products meet or exceed manufacturing requirements. Lubricants typically have a shelf life of 5 years under ideal storage conditions. Keep drums and totes in good condition and away from moisture. Keep bungs securely in place; as bungs breath moisture can seep in over time. Where possible, avoid storage in areas where the temperature fluctuates between extreme highs and lows.

Health, Safety, & Environment

GHS compliant Safety Data Sheets are available at nemco.ca under Safety Data Sheets. For SDS in French, please contact info@nemco.ca. This product is WHMIS 2015 classified. The SDS contains valuable information critical to the safe handling and proper use of the product. Always take used oil to an authorized collection point. Do not discharge into drains, soil, or water.

Quality

Nemco Resources Ltd works with respected industry suppliers for lubricant additives and base oils. Nemco is a member of ILMA and the manufacturing facility in Winnipeg, Manitoba is proud to be certified to ISO9001. For questions regarding quality, please contact your local Technical Sales Representative.

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CATERPILLAR G3520C FIELD TRIAL

Field Trial Description

- Location Canada
- Timing of trial October, 2013 to November, 2014
- Engine CAT G3520C
- Service Co-generation
- Fuel Bio-Gas Fuel, with H2S content in the fuel generally below 200 ppm, with some excursions
- Test duration 7,246 hours
- Oil changes 800 hour drain intervals targeted due to poor fuel quality

Field Trial Results

The engine oil performed well given the severe operating conditions of the engine and the variability in the fuel. The oil exhibited superior deposit control on the piston crown lands with reduced scuffing and bore polish. The oil also delivered superior deposit control behind piston rings (inner face deposits) providing enhanced engine durability.

The oil exhibited good oxidation and nitration control throughout the field trial and had good deposit control for all components that came in contact with the oil.

As a result of this field trial, the additive chemistry used in Nemco's NGLA 40 and formulated with API Group II Base Oil (Motiva Star 12) gained Caterpillar approval for co-gen service.



CAT 3520C Piston Head



CAT 3520C Piston Rings

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GE JENBACHER TYPE 4 FIELD TRIAL

Field Trial Description

- Location Portugal
- Timing of trial April, 2012 to July, 2014
- Engine Jenbacher Type 4 Engine, V20 configuration
- Service Co-generation
- Fuel Natural gas (pipeline quality)
- Test duration 8,915 hours
- Oil changes 2,000 hour oil drain intervals targeted, with minimum 6,000 hour test duration

Field Trial Results

The field trial ran in accordance with GE Technical Instruction TA1000-0099A,B&C. Three oil drain intervals of 2,000 hours were targeted with a minimum test duration of 6,000 hours. Overall the test ran for 8,915 hours.

At the end of the test the engine was inspected in accordance with GE Jenbacher technical instructions.

Cylinders 4 and 15 were chosen for inspection following an endoscopic inspection of the combustion chambers.

As a result of the field trial, the additive chemistry used in Nemco's NGLA 40 and formulated with API Group II Base oils (Chevron RLOP 600N) was approved for use in GE Jenbacher TA 1000-1109 (Type 2, 3 & 4) engines.



Jenbacher Type 4 Piston Head



Jenbacher Type 4 Piston Rings