HDAX® 9200 Low Ash Gas Engine Oil

SAE 40

Product Description

HDAX® 9200 Low Ash Gas Engine Oil is a premium performance, low ash, dispersant/detergent type gas engine oil. It offers robust component protection even under heavy loads, and is designed for use in natural gas applications.

Customer Benefits

HDAX 9200 Low Ash provides the following benefits:

- **Long oil life** — Formulated with a combination of premium base oils and high performance additives for extended oil drains*. Excellent oxidation and nitration resistance, with a strong alkaline reserve that has the ability to protect against the effects of acidic attack and oxidation, significantly prolonging the service life of the oil.
- **Clean pistons** — Offers combustion chamber and piston deposit control, liner protection, sludge and wear control, and corrosion protection.
- **Minimized valve recession** — The unique ash-producing additives in the oil allow minimal valve recession with low levels of combustion chamber deposits, to minimize the potential for pre-ignition and spark plug fouling.
- **Low fluid volatility** — Helps minimize oil consumption.
- **Low wear** — Provides exceptional protection against piston, ring, and linear scuffing, scoring and wear.

Features

HDAX 9200 Low Ash Gas Engine Oil is our top of the line gas engine oil that has proven field experience in gas engines in gas-gathering operations, offering extremely low sulfur, nitrogen, and aromatics, in combination with ashless dispersant and oxidation inhibitors, with a metallic detergent and anti-wear additive system. It offers reliable corrosion resistance and our most advanced deposit control formulation to control deposits and help prevent ring sticking in today's modern engines, including those with steel piston crowns rated at a high brake mean effective pressure (BMEP).

HDAX 9200 Low Ash Gas Engine Oil oxidation and nitration resistance is designed to minimize viscosity increases in service, while promoting long oil life.

Applications

HDAX 9200 Low Ash Gas Engine Oil is suited to new generation high output, turbocharged, low emission 4-cycle engines requiring low ash lubricants, and is recommended for use in natural gas applications. It is formulated to meet catalyst compatibility requirements with low phosphorus levels.

HDAX 9200 Low Ash Gas Engine Oil is suitable for use with fuels containing low levels of sulfur and chloro-fluoro-carbons (CFC). In sour gas/high CFC applications, lubricants with a higher base reserve, such as HDAX 6500 LFG SAE 40, may be required.

* Results will vary based on operating conditions and engine types. Always follow OEM recommendations and utilize used oil analysis testing when extending oil drain intervals.

Product(s) manufactured in the USA and Colombia.
Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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HDAX 9200 Low Ash Gas Engine Oil is approved for:

- **Caterpillar Energy Solutions GmbH** for CG132, CG170 & CG260 series engines
- **INNIO Jenbacher** gas engines, as listed in the table below:

Engine Type	Class A	Class B	Class C	Class S	Catalyst
Type 2/3	x			x	x
Type 4A	x			x	x
Type 4BD	x			x	x
Type 4CE	x			x	x
Type 6CE	x			x	x
Type 6FJ	x			x	x

Where **INNIO Jenbacher** divides fuel quality into these classes:

- Class A: Clean natural gas that complies with TA 1000-0300.
- Class B: Biogas and Sewage gas.
- Class C: Landfill gas.
- Class S: Special gases requiring special approval like Syngas.
- Catalyst: With an oxidation catalytic converter

- Engine oil approved for use in **Aggreko** engines, where (the Group II) HDAX 9200 Low Ash Gas Engine Oil products are approved for the 420 B and 420 C range for 50 Hz operation to a MAX drain interval of 2,000 hours
- **MTU** preliminary approval MTL 5074 for Series 4000 gas engines*
- **MWM** TCG series burning natural gas
- **RMB/Energie** burning natural gas
- **TEDOM** rule 61-0-0281.1 for natural gas and propane-butane
- **Waukesha** VGF, VGP & 220GL Series Engines, Natural Gas, including Cogeneration

*This preliminary approval may be used to carry out a field test which, on successful conclusion, will result in an approval for use in MTU gas engines and listing in their fluids and lubricants specification.

Recommended for four-stroke gas-fueled engines manufactured by:

- **Caterpillar Oil and Gas** G3300, G3400, G3500 and G3600 series
- **Cummins** QSV and QSK series
- **Dresser-Rand Guascor** (Category I and II Engines)
- **MAN Diesel & Turbo** natural gas and dual fuel cogeneration
- **Superior** 4-stroke (Engines now supplied by GE)
- **Wärtsilä** 25SG, 28SG, 34SG, 50SG, 175SG, 220SG, 20DF, 32DF, 34DF & 50DF series, with natural gas as the main fuel

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TYPICAL TEST DATA

SAE Grade	**40**
Product Number	*255275*
SDS Number *U.S.* *Canada* *Mexico* *Colombia*	 *43629* *43630* *43631* *54160*
Density at 15°C, kg/L	0.881
Viscosity, Kinematic mm^2/s at 40°C mm^2/s at 100°C	 125 13.5
Viscosity Index	103
Flash Point, °C(°F)	278(532)
Pour Point, °C(°F)	-33(-27)
Sulfated Ash, mass % ASTM D874	0.50
Base Number, mg KOH/g ASTM D2896	 4.2
Phosphorus, ppm	270
Zinc, ppm	320

Minor variations in product typical test data are to be expected in normal manufacturing.

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