HDAX® 9200 Low Ash Gas Engine Oil SAE 40

Premium performance low-ash gas engine lubricant

Product description

HDAX 9200 Low Ash Gas Engine Oil SAE 40 is a premium performance low-ash, dispersancy and detergency type gas engine lubricant, offering robust component protection even under heavy loads, and is designed for use in natural gas applications.

HDAX 9200 Low Ash Gas Engine Oil SAE 40 is formulated with a premium base oil, offering extremely low sulphur, nitrogen and aromatic content, in combination with ashless dispersant and oxidation inhibitors, with a metallic detergent and anti-wear additive system. HDAX 9200 Low Ash Gas Engine Oil SAE 40 offers reliable corrosion resistance and good combustion chamber deposit protection. Good piston deposit control helps minimise ring sticking. HDAX 9200 Low Ash Gas Engine Oil SAE 40 oxidation and nitration resistance performance is designed to minimise viscosity increases in service.

Customer benefits

- Oxidation and nitration resistance with base number retention offer extended drain in engines designed with a very low oil feed rate
- Combustion chamber and piston deposit control, increased liner protection, sludge, wear and corrosion resistance help reduce downtime
- Helps minimise valve recession, combustion chamber deposits and ash build up, helping minimise the potential for pre-ignition
- Dispersant/detergent system and oxidation/nitration resistance helps minimise oil thickening and promotes engine cleanliness

Product highlights

- **Offers extended drain in very low oil feed rate engines**
- **Designed for sludge, wear and corrosion resistance**
- **Helps minimise valve recession**
- **Formulated for optimum engine cleanliness**
- **Designed to resist sludge and filter plugging**
- **Suitable for use with most catalyst systems**

Selected specification standards include:

Caterpillar	Jenbacher
MWM (Caterpillar Energy Solutions)	RMB/Energie
TEDOM	Waukesha

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.

- Designed to resist sludge formation, filter plugging and cylinder liner honing pattern glazing, helping optimise oil flow and consumption
- Low phosphorus additive system suitable for use with most catalyst systems

Applications

- HDAX 9200 Low Ash Gas Engine Oil SAE 40 is designed for the new generation of high output, turbocharged, low emission 4-cycle engines requiring low ash lubricants and is recommended for use in natural gas applications.
- HDAX 9200 Low Ash Gas Engine Oil SAE 40 also meets the more demanding needs of high speed 4-cycle gas engines in cogeneration applications.
- HDAX 9200 Low Ash Gas Engine Oil SAE 40 is formulated to meet catalyst compatibility requirements.
- HDAX 9200 Low Ash Gas Engine Oil SAE 40 is suitable for use with fuels containing low levels of sulphur and chloro-fluoro-carbons (CFC). (In sour gas/high CFC applications, lubricants with higher base reserve may be required – for example, HDAX 9500).

Approvals, performance and recommendations

Approvals

- Caterpillar CG132, CG170 and CG260 engines
- Jenbacher TA 1000-1109, Fuel Class A [1] for the following engine types and versions (including engines fitted with an oxidation catalytic converter), extended oil change intervals:
  - Type 2 and 3
  - Type 4 (versions A and B)
  - Type 4 (from version C)
  - Type 6 (versions C and E)
  - Type 6 (from version F)
- MWM (Caterpillar Energy Solutions): Gas Engines
- RMB/Energie: Natural gas
- TEDOM 61-0-0281.1: Fuel types G (natural gas), P (propane/butane)
- Waukesha: Cogeneration applications

Recommendations

- Proof of Performance gained during extensive field trials in Caterpillar 3516 E+ and 3516 TALE engines

[1] Natural gas, associated petroleum gas, mine gas, biogas (sulphur < 200 mg/10 kWh).

Typical test data

Test	Test Methods	Results
Viscosity Grade		**SAE 40**
Density at 15°C, kg/l	ASTM D4052	0.874
Kinematic viscosity at 100°C, mm^2/s	ASTM D445	13.4
Pour Point, °C	ASTM D5950	-33
Flash Point, COC, °C	ASTM D92	278
Total Base Number, mg KOH/g	ASTM D2896	4.2
Sulphated Ash, %wt	ASTM D874	0.41

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.