



HDAX[®] 9300 SAE 40

Premium performance gas engine oil

Product description

HDAX 9300 SAE 40 is a premium performance medium ash dispersant/detergent type gas engine oil, specifically designed to offer protection to gas engines running on natural gas under heavily loaded conditions, including high output engines in the 10 MW_{el} class.

HDAX 9300 SAE 40 offers robust protection against corrosion, harmful deposit and sludge formation, and promotes protection against engine wear and scuffing, helping optimise engine service life.

HDAX 9300 SAE 40 is formulated with premium base oils which contain extremely low levels of sulphur, nitrogen and aromatics, combined with a premium additive package containing ashless dispersants, oxidation inhibitors, metallic detergents and a metallic anti-wear agent.

Customer benefits

- Designed to protect engines running on natural gas, operating under heavily loaded conditions, including high output 10 MW_{el} class units
- Oxidation/nitration resistance with base number retention offers extended drain, and compatible with very low oil feed rate engines
- Dispersant/detergent formulation with oxidation/nitration resistance helps minimise oil thickening, sludge formation and filter plugging
- Promotes piston deposit control, and protection from cylinder liner scuffing and abrasive wear, offering longer engine service life
- Formulated to optimise ash level for reliable valve recession control and to help prevent potential pre-ignition
- Low phosphorus additive design allows use with catalyst systems

Product highlights

- **Designed for heavy loads, including high output 10 MW_{el} class units**
- **Offers extended drain in very low oil feed rate engines**
- **Helps minimise oil thickening and filter plugging**
- **Promotes longer engine service life**
- **Formulated to prevent potential pre-ignition**
- **Allows use with catalyst systems**

Selected specification standards include:

Jenbacher

Applications

HDAX 9300 SAE 40 is designed for use in high output, low emission four-stroke engines running on natural gas. It has a medium ash level, which is preferred in high Brake Mean Effective Pressure engines with steel pistons (BMEP greater or equal to 22 bar).

The optimised ash level helps provide protection against valve recession, while reducing the formation of ash deposits in the combustion chamber which could lead to pre-ignition.

The combination of base number retention and oxidation/nitration resistance offers extended drain capability - even in applications where the oil feed rate is deliberately kept low, placing extra stresses on the lubricant.

HDAX 9300 helps prevent sludge formation on cylinder liners, which could interfere with oil flow and lead to higher oil consumption.

HDAX 9300 is formulated to control carbonaceous deposits on pistons, helping improve piston ring operation and scuffing protection to cylinder liners.

(HDAX 9300 is intended for use with fuels containing low levels of sulphur and Chloro-Fluoro-Carbons (CFC). In sour gas/high CFC applications, use a lubricant designed for that purpose – for example, HDAX 9500 SAE 40.)

Approvals, performance and recommendations

Approvals

- Jenbacher TA 1000-1108, Fuel Class A ^[1]
 - Type 9 (all versions)

Performance

- Jenbacher TA 1000-1109, Fuel Class A [1] for the following engine types and versions:
 - Type 4 (from version C)
 - Type 6 (from version F)

^[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
Shelf Life: 60 months from date of filling indicated on the product label.		
Density, 15 °C, kg/l	ASTM D4052	0.876
Viscosity, Kinematic, 100 °C, mm ² /s	ASTM D445	13.5
Pour Point, °C	ASTM D97	-33
Flash Point, COC, °C	ASTM D92	270
Total Base Number, mg KOH/g	ASTM D2896	6.2
Sulphated Ash, %wt	ASTM D874	0.70

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.

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Health, safety, storage and environmental Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

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