



# HDAX<sup>®</sup> Low Ash Gas Engine Oil SAE 30, 40

## High performance low ash gas engine lubricants

### Product description

HDAX Low Ash Gas Engine Oils are low ash, bright stock-free, dispersant/detergent type gas engine oils, formulated with premium Group II base oil technology in combination with ashless dispersant agents, oxidation inhibitors, metallic detergency and metallic anti-wear additives.

HDAX Low Ash Gas Engine Oils promote oxidation and nitration resistance, helping reduce the build up of engine deposits and extending oil and filter service life. HDAX Low Ash Gas Engine Oils contribute piston and ring belt deposit control to help protect against the formation and build-up of engine sludge. These advanced lubricants offer protection against ring and liner scuffing and wear.

### Customer benefits

- Offers reduced maintenance downtime, lower maintenance costs and longer engine service life
- Promotes protection against piston, ring and liner scoring and scuffing, helping reduce wear and maintenance downtime
- Advanced additive technologies aid reduced valve recession, combustion chamber deposits, pre-ignition and sparkplug fouling
- Nitration inhibition minimises viscosity increases, assisting wear protection and increased engine life
- API CD/CF performance aids piston cleanliness, varnish-free piston skirts and helps maintain resistance to ring-sticking
- Formulated to promote sludge minimisation and keep-clean performance in the crankcase, valve rocker cover and top deck areas
- Low phosphorus formulation assists compatibility with NSCR (non selective catalytic reduction) emissions reduction systems

### Product highlights

- **Reduced maintenance downtime**
- **Promotes increased engine protection**
- **Aids reduced valve recession, deposits, pre-ignition and sparkplug fouling**
- **Assists wear protection and increased engine life**
- **Promotes keep-clean engine performance**
- **NSCR compatibility**

#### Selected specification standards include:

API CD/CF	Ajax
Caterpillar	Clark-Dresser
Delaval Enterprise	Dresser-Rand
Fairbanks-Morse/MEP	GE Jenbacher
MWM	Superior
Wärtsilä	Waukesha
Worthington	

## Applications

- HDAX Low Ash Gas Engine Oils are recommended for four-stroke and selected two-stroke stationary engines fuelled by natural or synthetic gas.
- HDAX Low Ash Gas Engine Oils are formulated to meet NSCR catalyst compatibility requirements and are especially suited for installations requiring low phosphorus oil to prevent exhaust catalyst poisoning.
- HDAX Low Ash Gas Engine Oils are suitable for use with fuels containing low levels of sulphur and Chloro-Fluoro-Carbons (CFC). In sour gas/high CFC applications, an oil with higher base reserve may be required.
- HDAX Low Ash Gas Engine Oils are formulated to meet the performance requirements of the obsolete API Service Category CD/CF.
- Waukesha Cogeneration application (SAE 40 only)
- Waukesha SG 175/220 (formerly provided by Wärtsilä, SAE 40 only)

### Performance

- APICD/CF (obsolete)
- AjaxTwo-stroke
- Caterpillar
- Clark-Dresser Two-stroke
- Delaval Enterprise
- Dresser-Rand Category I, II and III
- Fairbanks-Morse/MEP Two-stroke
- GE Jenbacher
- MWM (formerly Deutz)
- Superior
- Wärtsilä
- Waukesha
- Worthington Two-stroke and four-stroke

## Approvals, performance and recommendations

### Approvals

- GE Jenbacher Type 2,3 and 6 engines equipped with and without catalyst in Fuel A applications (SAE 40 only)
- Wärtsilä (SAE 40 only)

Typical test data			
Test	Test methods	Results	
Viscosity Grade		30	40
Product Code		232327	000390
Density, 15°C, kg/l	ASTM D4052	0.877	0.875
Kinematic viscosity, 40°C, mm <sup>2</sup> /s	ASTM D445	97.3	124
Kinematic viscosity, 100°C, mm <sup>2</sup> /s	ASTM D445	11.4	13.5
Viscosity Index	ASTM D2270	104	104
Pour point, °C	ASTM D97	-30	-33
Flash point COC, °C	ASTM D92	215	260
Total Base Number, mg KOH/g	ASTM D2896	4.2	4.2
Sulphated Ash, %wt	ASTM D874	0.5	0.5

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.

**Disclaimer** Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheets.

**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). MSDSs 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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