



HDAX[®] 3200 LOW ASH GAS ENGINE OIL

SAE 30, 40

PRODUCT DESCRIPTION

HDAX[®] 3200 Low Ash Gas Engine Oils are high performance, low ash, dispersant/detergent type engine oils designed to be used primarily in four-stroke stationary engines fueled by natural or synthetic gas.

CUSTOMER BENEFITS

HDAX 3200 Low Ash Gas Engine Oils deliver value through:

- **Low wear** — Provide excellent protection against piston, ring, and liner scuffing, scoring, and wear.
- **Minimal valve recession** — The level and type of ash producing additives in the oils controls valve recession with low levels of combustion chamber deposits to minimize the potential for pre-ignition and spark plug fouling.
- **Minimum oil viscosity increase** — Oxidation inhibited and nitration resistant to help ensure minimum viscosity increase and low wear rates.
- **Clean pistons** — Excellent piston cleanliness to help prevent ring sticking and maintain clean, varnish-free piston skirts.
- **Clean crankcases and top decks** — Minimize the formation of sludge in the crankcase and in the valve rocker cover/top deck area.
- **Catalyst compatibility** — Formulated to be compatible with exhaust emissions reduction systems.

FEATURES

HDAX 3200 Low Ash Gas Engine Oils are formulated with high quality base stocks and an additive package containing ashless dispersant, oxidation inhibitors, metallic detergents, and a metallic antiwear agent.

HDAX 3200 Low Ash Gas Engine Oils provide excellent oxidation and nitration resistance, which minimize the buildup of insolubles. HDAX 3200 Low Ash Gas Engine Oils give excellent protection against ring/liner scuffing and wear. They also minimize valve recession in four-stroke engines, provide excellent piston/ring belt deposit control and effectively protect against the formation and buildup of engine sludge.

APPLICATIONS

HDAX 3200 Low Ash Gas Engine Oils are recommended for four-stroke and selected two-stroke stationary engines fueled by natural or synthetic gas.

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

- **Caterpillar**
- **Delaval Enterprise**
- **Dresser-Rand** Categories I, II, and III (SAE 30)
- **Superior**
- **Waukesha**
- **Worthington**

HDAX 3200 Low Ash Gas Engine Oils are formulated to meet catalyst compatibility requirements and are especially suited for installations requiring low phosphorus oil to prevent exhaust catalyst poisoning.

HDAX 3200 Low Ash Gas Engine Oils are suitable for use with fuels containing low levels of sulfur. In sour gas applications, an oil such as HDAX 5300 Medium Gas Engine Oil SAE 40 with higher base reserve may be required.

Product(s) manufactured in the USA.

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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GEO-75

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TYPICAL TEST DATA

SAE Grade	30	40
<i>Product Number</i>	232310	232311
<i>SDS Number</i>	32277	32277
Density at 15°C, kg/L	0.8773	0.8794
Viscosity, Kinematic cSt at 40°C cSt at 100°C	97.3 11.4	124 13.5
Viscosity Index	104	104
Flash Point, °C(°F)	222(432)	230(446)
Pour Point, °C(°F)	-27(-17)	-27(-17)
Sulfated Ash, wt %	0.45	0.45
Acid Number, ASTM D664	1.0	1.0
Base Number, ASTM D2896	4.0	4.0
Phosphorus, ppm	280	280
Zinc, ppm	320	320

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

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