



HDAX[®] 3100 ASHLESS GAS ENGINE OIL

SAE 15W-40, 40

PRODUCT DESCRIPTION

HDAX[®] 3100 Ashless Gas Engine Oils are high performance, bright stock free, ashless, dispersant-type natural gas engine oils.

CUSTOMER BENEFITS

HDAX 3100 Ashless Gas Engine Oils deliver value through:

- **Low ring and cylinder liner wear**
- **Minimal ash deposits** — Minimizes deposits on valves, piston heads, combustion chambers, spark plugs, and port surfaces, thereby minimizing the risk of pre-ignition and detonation.
- **Clean engines** — The ashless dispersant inhibits sludge formation and piston deposits in naturally aspirated or turbocharged two-stroke engines.
- **Long oil life** — Oxidation inhibitors minimize oil degradation and provide long oil life.
- **Ease in starting** — SAE 15W-40 provides good startup and lubricant pumpability in cold weather.

FEATURES

HDAX 3100 Ashless Gas Engine Oils are manufactured using selected paraffinic base oils and an additive package containing a dispersant, wear inhibitor, and oxidation inhibitor.

They are formulated for use in high speed, high output, turbocharged two-stroke and selected four-stroke gas engines operating at full capacity.

Minimal ash content in HDAX 3100 Ashless Gas Engine Oils help protect combustion chamber and spark plug from deposit formation that can result in pre-ignition, detonation, and loss of engine power.

HDAX 3100 Ashless Gas Engine Oils

- provide long overhaul intervals and filter life in ashless oil applications
- help prevent valve burning or guttering by maintaining clean valve faces
- maximize the lubricant service life by controlling viscosity increase with an effective ashless oxidation inhibitor
- offer excellent wear protection
- protect against engine corrosion

APPLICATIONS

HDAX 3100 Ashless Gas Engine Oils are recommended for two-stroke high output, turbocharged and naturally aspirated gas engines requiring an ashless oil. They are also suitable for selected naturally aspirated four-stroke engines where minimal ash deposits are desired.

HDAX 3100 Ashless Gas Engine Oil SAE 40 is our preferred lubricant for engines manufactured by

- **Ajax** (SAE 40 or SAE 15W-40)
- **Clark-Dresser**
- **Cooper Bessemer** (two-stroke)
- **Worthington** (two-stroke)

HDAX 3100 Ashless Gas Engine Oil SAE 40 is suitable for engines manufactured by

- **Caterpillar** G3500 NA series
- **Waukesha** VR and **Intermediate/Clinton** series (four-stroke)
- **Fairbanks-Morse**/MEP (two-stroke)

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-10

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TYPICAL TEST DATA

| SAE Grade | 15W-40 | 40 |
|---|-------------|-------------|
| <i>Product Number</i> | 235458 | 235456 |
| <i>SDS Number</i> | 32271 | 32271 |
| Density at 15°C, kg/L | 0.8806 | 0.8762 |
| Viscosity, Kinematic cSt at 40°C cSt at 100°C | 134 15.6 | 121 13.0 |
| Viscosity Index | 122 | 100 |
| Flash Point, °C(°F) | 236(457) | 258(496) |
| Pour Point, °C(°F) | -30(-22) | -30(-22) |
| Sulfated Ash, wt % | <0.1 | <0.1 |
| Acid Number, ASTM D664 | 1.0 | 1.0 |
| Base Number, ASTM D2896 | 0.8 | 0.8 |
| Phosphorus, ppm | 700 | 700 |
| Zinc, ppm | 380 | 380 |

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

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