HDAX® 9700
ISOCLEAN® CERTIFIED LUBRICANT
SAE 40

PRODUCT DESCRIPTION
HDAX® 9700 ISOCLEAN® Certified
Lubricant is a premium performance
uniquely designed engine oil
recommended for dual fuel, medium-
speed, four stroke cycle trunk piston engines burning
natural gas with approximately 3 percent diesel pilot
fuel ignition and up to 100 percent low sulfur diesel fuel
(<500 ppm sulfur). Chevron ISOCLEAN Certified
Lubricants have been certified to meet specified ISO
Cleanliness standards at point of delivery using
industry leading filtration and testing technology.
ISOCLEAN Certified products are the first step for
contamination control and maximizing component life.

CUSTOMER BENEFITS
HDAX 9700 ISOCLEAN Certified Lubricant provides the following benefits:

- **Ready to use** — Enables users to meet stringent original equipment manufacturers’ cleanliness standards for fill lubricants.
- **Flexibility** — ISO Cleanliness targets can be customized to fit your business application needs.
- **Peace of mind** — Each delivery of Chevron ISOCLEAN Certified Lubricant includes an ISOCLEAN Certificate of Analysis.
- **OE fluid cleanliness requirements** — Customized to meet specific equipment manufacturers’ fluid cleanliness requirements.
- **Smooth engine operation** — Fit for purpose formulation minimizes risk of rough engine operations that may result from misfiring or detonation when operating in dual fuel mode and using an elevated ash engine oil, as is typical of medium speed diesel engine oils.
- **Long oil life** — A combination of premium base oils and high performance additives offer excellent oxidation and nitrination resistance over extended oil life.*
- **Clean pistons** — Very low combustion chamber and piston deposits help protect liners from scoring and extend engine top-end maintenance cycles.
- **Minimized valve recession** — The unique ash-containing additives in the oil allow minimal valve recession with low levels of combustion chamber deposits, to minimize the potential for pre-ignition and spark plug fouling.
- **Low fluid volatility** — Helps minimize oil consumption.

FEATURES
HDAX 9700 ISOCLEAN Certified Lubricant is a premium dual fuel gas engine oil with proven field service experience in dual fuel engines operating with diesel pilot ignition natural gas mode and up to 100 percent diesel mode for extended operational periods. It offers reliable deposit control, corrosion resistance and wear protection. Its hybrid technology is designed to control ash accumulation in combustion chambers to minimize risk of pre-ignition and the rough engine operation that may be associated with engine misfire and detonation.

* Used oil analysis is recommended for establishing and maintaining oil service intervals.

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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APPLICATIONS

HDAX® 9700 ISOCLEAN® Certified Lubricant is recommended for dual fuel, natural gas / ultra low sulfur diesel medium-speed trunk piston engines in coastal marine, inland marine, railroad and power generation applications. These high output engines may be turbocharged and equipped with exhaust catalysts systems.

HDAX 9700 ISOCLEAN Certified Lubricant has field service experience in:

• Wärtsilä dual fuel engines in coastal marine operations

Consult with your Chevron Lubricant Representative or Chevron ISOCLEAN Certified Lubricants Marketer to set specific ISO Cleanliness targets for your business application.

TYPICAL TEST DATA

<table>
<thead>
<tr>
<th>SAE Grade</th>
<th>40</th>
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<tbody>
<tr>
<td>Product Number</td>
<td>232314</td>
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<tr>
<td>SDS Number</td>
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<tr>
<td>U.S.</td>
<td>50346</td>
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<tr>
<td>Canada</td>
<td>50347</td>
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<tr>
<td>Density at 15°C, kg/L</td>
<td>0.8721</td>
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<tr>
<td>Viscosity, Kinematic</td>
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</tr>
<tr>
<td>mm²/s at 40°C</td>
<td>117</td>
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<tr>
<td>mm²/s at 100°C</td>
<td>13.4</td>
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<tr>
<td>Viscosity Index</td>
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</tr>
<tr>
<td>Flash Point, °C(°F)</td>
<td>268(514)</td>
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<tr>
<td>Pour Point, °C(°F)</td>
<td>-36(-33)</td>
</tr>
<tr>
<td>Sulfated Ash, mass % ASTM D874</td>
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<tr>
<td>Base Number, mg KOH/g</td>
<td>5.8</td>
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<tr>
<td>ASTM D2896</td>
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<tr>
<td>Phosphorus, ppm</td>
<td>280</td>
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<tr>
<td>Zinc, ppm</td>
<td>330</td>
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</table>

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

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.