



marine products

# HDAX® 9700 SAE 40



## Description

HDAX® 9700 is a premium performance, uniquely designed engine oil recommended for dual fuel, medium-speed, four-stroke cycle trunk piston engines burning natural gas with diesel pilot fuel ignition and up to 100 percent low sulfur diesel fuel (<1000 ppm sulfur).

HDAX 9700 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 helps provide effective deposit control, corrosion resistance and contributes to wear protection. The formulation is designed to control ash accumulation in combustion chambers and exhaust after treatment while providing sufficient alkalinity to help protect against acidic corrosion.

## Typical Characteristics

MPID	219911
Density at 15 °C, kg/l	0.87
Kinematic viscosity at 40 °C, mm <sup>2</sup> /s	117.0
Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	13.4
Viscosity Index	110
Pour Point, °C	-36
Flash Point COC, °C	268
Total Base Number, mg KOH/g	5.8
Sulfated Ash, %wt	0.7

## Recommended Applications

HDAX 9700 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 SAE 40 has field service experience in Wärtsilä dual fuel engines in coastal marine operations.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practice.



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### HDAX 9700 is approved by:

- ✓ **MAN Energy Solutions** (4-S medium speed engines, DF (NG, Distillate <1000ppm sulfur) )
- ✓ **MAN Energy Solutions** (4-S medium speed engines, Distillate <1000ppm sulfur)
- ✓ **Hyundai Himsen DF**
- ✓ **Anglo Belgian Corporation** (ABC) 6DZ and 8DZ in-line with DPF and fuel S<0.1%
- ✓ **Anglo Belgian Corporation** (ABC) 12DZ and 16DZ V-shape with DPF and fuel S<0.1%

### HDAX 9700 meets the requirements of:

- ✓ **API CF**

### Performance Benefits

#### 1. Smooth Engine Operation

Fit for purpose formulation suitable for use with wide range of fuels, allowing switching from gas to diesel without need to change oil.

#### 2. Long Oil Life

A combination of premium base oils and high performance additives offers effective oxidation and nitration resistance over extended oil life. Used oil analysis is recommended for establishing and maintaining oil service intervals.

#### 3. Clean Pistons

Very low combustion chamber and piston deposits help protect liners from scoring and extend engine top-end maintenance cycles.



**Disclaimer.** Data provided in this PDS is based on standard tests under laboratory conditions and is indicative only. Minor variations which do not affect product performance are expected in normal manufacturing. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Recommendations differ between engine manufacturers so always consult your manual. Neither Chevron nor its subsidiaries make any warranty or representation as to the accuracy or completeness of this PDS and neither Chevron nor its subsidiaries accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.