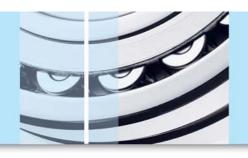
HDAX® 5100 Ashless Gas Engine Oil SAE 15W-40, 30, 40

Product Data Sheet







Product description

HDAX® 5100 Ashless Gas Engine Oils are advanced performance, premium quality, ashless, natural gas engine oils.

Customer benefits

HDAX 5100 Ashless Gas Engine Oils deliver value through:

- Excellent low temperature performance HDAX 5100 Ashless Gas Engine Oil SAE 15W-40 is less viscous than SAE 30 and 40 oils at low temperatures, so it provides easy startup and improved cold temperature lubrication as compared to straight grades.
- · Promotes low maintenance cost and long engine life
- **Minimizes ash deposits** Protects against spark plug fouling from lubricating oil ash deposits. Minimizes ash deposits on valves, piston heads, combustion chamber surfaces, spark plugs, and port surfaces, minimizing the risk of pre-ignition and detonation.
- Low ring and cylinder liner wear
- **Exceptional engine cleanliness** Minimizes engine deposits at both high and low operating temperatures through the use of an ashless dispersant.
- **Minimum viscosity increase in severe service** Ashless oxidation inhibitor minimizes viscosity increase allowing for long oil drain intervals.
- **Proven performance** in older four-stroke naturally aspirated and turbocharged engines.

Applications

HDAX 5100 Ashless Gas Engine Oils are recommended for all two-stroke and selected four-stroke stationary engines that require an ashless-type engine oil and which use natural gas.

They are the recommended lubricant for two-stroke gas engines with high compression ratios and turbochargers, and two-stroke engines known to be sensitive to combustion chamber and port deposits.

Product features:

- HDAX 5100 Ashless
 Gas Engine Oils are
 formulated with Group II
 base stocks and a carefully
 balanced ashless package
 of dispersant, antioxidant,
 extreme pressure, and
 corrosion inhibitor
 additives.
- HDAX 5100 Ashless
 Gas Engine Oils are
 formulated without
 bright stock for all
 two-stroke and selected
 four-stroke high speed,
 high output, turbocharged
 natural gas engines
 operating at full capacity.
- HDAX 5100 Ashless
 Gas Engine Oils help
 provide exceptionally
 clean engine parts, even
 under severe operating
 conditions and extended
 overhaul intervals.
 They help protect
 against the formation
 of crankcase sludge and
 help to maintain clean
 exhaust ports in
 two-stroke engines.









continued

Performance standards

 ${\sf HDAX}^{\it @}$ 5100 Ashless Gas Engine Oils are recommended for gas fueled engines manufactured by:

- Ajax
- **Caterpillar** (except 3400, 3500, 3600)
- Clark-Dresser
- Cooper Bessemer (two-stroke)
- Dresser-Rand (Ingersoll-Rand) Categories I and II
- Fairbanks-Morse/MEP
- Waukesha VR and Intermediate/Clinton
- Worthington (two-stroke)

SAE 15W-40 oils may not be appropriate for large medium speed gas engines. Consult Chevron at lubetek@chevron.com before using HDAX 5100 Ashless Gas Engine Oil SAE 15W-40 in these applications.







continued

Typical test data

HDAX® 5100 ASHLESS GAS ENGINE OIL	RESULTS		
SAE Grade	15W-40	30	40
Product Number	232308	232373	232307
SDS Number	26850	26850	7050
Density at 15°C, kg/L	0.8746	0.8773	0.8790
viscosity, Kinematic cst @ 40°C cst @ 100°C	128.6 15.72	95.6 11.6	120 13.7
Viscosity Index	128	109	111
Flash Point, °C(°F)	230(446)	252(486)	260(500)
Pour Point, °C(°F)	-34(-29)	-32(-26)	-26(-15)
Sulfated Ash, wt %	nil	nil	nil
Acid Number, ASTM D664	0.9	0.8	0.8
Base Number, ASTM D2896	2.8	2.8	2.8
Phosphorus, ppm	670	670	670
Zinc, ppm	<10	<10	<10

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by Chevron Global Lubricants: Africa, Middle East and Pakistan

Environment, Health and Safety Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltexoils.com.