KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil



PRODUCT DESCRIPTION

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil is a toptier, extended service life product specifically designed for use in medium and high speed (rpm) engines fueled by pipeline natural gas.

APPLICATIONS

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil is designed and recommended for use in heavy duty four-stroke engines operating on pipeline quality (clean) natural gas under high load conditions in all seasons. It is also recommended for four-stroke gas engines used in cogeneration applications and for engines fueled by synthetic gas.

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil is suitable for use with fuels containing low levels of sulfur and Chloro-Fluoro Carbons (CFC's)

Some typical applications where low ash natural gas engine oils are used include:

- Natural Gas compression and transmission
- Wellhead gas pumpers
- Oil pumpers
- Irrigation systems
- Total energy systems
- Waste water treatment cogeneration plants











FEATURES AND BENEFITS

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil is formulated with thermally stable, high VI base oils that are naturally resistant to oxidation. These advanced, ultra-pure base oils are combined with a unique, field proven additive system engineered for outstanding engine component wear protection and extended oil life by resisting oxidation and nitration. This exclusive detergent/dispersant additive system provides an outstanding level of deposit control while also effectively neutralizing the corrosive by-products of combustion. Special valve cushioning additive components help reduce exhaust valve seat and face wear during severe service. The low ash, low phosphorus composition meets Non-Selective Catalytic Reduction (NSCR) catalyst compatibility requirements.

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil provides value through the following benefits:

- Extended engine life Reduced friction for excellent protection against engine wear and improved economy. High TBN retention, providing extra protection against corrosive wear even during long service intervals.
- **High viscosity index** Highly resistant to viscosity shear loss and thermal breakdown from extended high temperature operation for long lubricant life.
- Engine cleanliness Lower oil volatility and viscosity loss at elevated temperatures promotes reduced oil consumption rates, cleaner combustion chambers, and less exhaust emissions.
- Outstanding antiwear Optimum level of active detergent reduces piston ring and cylinder liner wear. Effective detergent alkalinity minimizes corrosive wear, providing additional protection when using varying fuel sources. Meets sensitive OEM bearing wear requirements assuring long bearing life.
- Extended oil drain interval very low combustion chamber deposits and highly effective acid neutralization promotes long oil life for lower total cost per hour of operation.



KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil

SPECIFICATIONS AND APPROVALS

KLONDIKE SAE 40 Low Ash Natural Gas Engine Oil is formulated to meet the performance requirements of API Service Category CF. This premium fluid technology has hundreds of thousands of hours of commercial service and is recommended for use in four-stroke natural gas-fueled engines where OEM requires SAE 40 engine oil with low sulfated ash content. Such engine manufacturers include (but is not limited to):

- Caterpillar (3300, 3400, 3500, 3600 Series)
- · Cummins Rio-Grande
- Dresser-Rand (Categories I, II, and III)
- Fairbanks Morse
- GE Jenbacher
- MWM (DEUTZ)
- MAN Co-gen
- Minneapolis-Moline
- Rolls Royce
- Stewart & Stevenson
- Superior
- Wärtsilä SACM 150/175
- · Waukesha Co-gen
- White
- Worthington

TYPICAL TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	SAE 40 LOW ASH
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.88
Viscosity @ 40°C cSt	ASTM D445	128
Viscosity @ 100°C cSt	ASTM D445	13.6
Pour Point, °C	ASTM D97	-28
Flash Point, °C	ASTM D92	230
Viscosity Index	ASTM D2270	100
Sulfated Ash, wt. %	ASTM D874	0.48
Calcium, wt %	ASTM D5185	0.12
Nitrogen, wt %	ASTM D4629	0.095
Phosphorus, ppm	ASTM D5185	275
Zinc, ppm	ASTM D5185	315
TBN, mgKOH/g	ASTM D2896	5.1
TAN mgKOH/g	ASTM D664	1.7

HEALTH AND SAFETY

This product is not expected to have adverse health implications when used for its intended application. For detailed information on safe handling of this product, refer to its Material Safety Data Sheet (MSDS). To obtain an MSDS on this or any other KLONDIKE product, please visit www.klondikelubricants.com or call 1-877-293-4691. When disposing of used product, be responsible to the environment.

BRAVING THE FORCE OF MOVEMENT

KLONDIKE stands for robust, reliable, high quality products tailored to suit the requirements of the on- and off-road heavy duty, automotive and industrial markets. Our solutions span from trend-setting retail lubricants through small-batch custom formulations to large bulk orders ready for immediate delivery.

The extensive KLONDIKE product range includes premium oils, lubricants, greases, chemicals and specialty fluids formulated with virgin base oils and protective inhibitors. Designed to handle the most extreme climates and operating conditions, the KLONDIKE products protect and extend the life of your equipment, optimize performance and improve productivity while meeting and exceeding industry standards and specifications.

KLONDIKE Lubricants Corporation

Toll-free 1-877-293-4691

info@klondikelubricants.com www.klondikelubricants.com

All stated physical properties are typical of standard production and may vary.