# KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil



#### PRODUCT DESCRIPTION

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil is a high performance engine oil for naturally aspirated and turbocharged diesel engines where the SAE 10W-40 viscosity grade and API CK-4 or previous service categories are specified.

#### **APPLICATIONS**

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil is specifically engineered for modern diesel engines operating under severe service in a wide range of climatic conditions and ambient temperatures. An ideal mixed fleet engine oil designed for naturally aspirated and turbocharged heavy duty diesel engines in mobile and stationary equipment where the API CK-4 service category and SAE 10W-40 viscosity grade is preferred. KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil may be used in the same applications as SAE 15W-40 CK-4 but where superior cold start performance is desired. Advanced API CK-4 additive technology is fully backwards compatible with, and replaces, service categories CJ-4, CI-4 Plus, and previous.

Some typical applications include:

- Modern off-highway engines including those adapted for current and future emissions standards in construction, agriculture, marine, and mining
- Mixed fleets where product consolidation is desired for performance and economics











# **FEATURES AND BENEFITS**

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Engine Oil is a premium heavy duty engine oil engineered to deliver outstanding wear protection and performance in modern heavy duty diesel engines. Ultrapure conventional and synthetic base oils carefully balanced with advanced additive technology ensure this heavy duty engine oil will deliver outstanding long-term performance for heavy duty engine applications operating under high-load, high-stress conditions in all climates. Optimum base oil viscosity improves cold start efficiency and offers economy benefits as a result of lower coefficient of friction and reduced engine drag.

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil contains field proven additive technology delivering maximum control on engine wear, outstanding engine cleanliness, and high TBN retention for outstanding lubricant life. Product is highly shear stable and retains OEM mandated HTHS (high temperature, high shear) viscosity under the most extreme conditions in the engine offering outstanding engine durability. Metal anti-wear protection exceeds API CK-4 standards and tough OEM specifications.

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil meets the stringent requirements of API Service Category CK-4 for heavy duty diesel engines running on Ultra Low Sulfur Diesel (ULSD) and equipped with after treatment devices. Exceeds all requirements of current emission control systems such as Exhaust Gas Recirculation (EGR), Diesel Particulate Filter (DPF), or Selective Catalytic Reduction (SCR) technologies.

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend Heavy Duty Engine Oil delivers value through the following benefits:

**Premium base oil blend** – excellent all-season performance characteristics.

**Engine efficiency** – advanced technology keeps engine components clean and reduces oil consumption.

**Outstanding anti-wear** – maximum engine durability in all service applications.

**Emission compliant** – compliant with all emission control equipment and promotes extended DPF life.

**Extended service life** – outstanding TBN and shear induced viscosity retention supports extended lubricant life.

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# SPECIFICATIONS AND APPROVALS

KLONDIKE SAE 10W-40 CK-4 Synthetic Blend meets the requirements of the following engine specifications:

- API CK-4, CJ-4, CI-4 PLUS and previous
- ACEA E9, E7
- Caterpillar ECF-3 and previous
- Cummins CES 20086, 20081 and previous
- CNH MAT 3521
- Detroit Diesel DFS 93K222, 93K218 and previous
- DQC IV-10 LA
- Global DHD-1
- JASO DH-2
- Mack EOS 4.5, EO-O, EO-N and previous
- MAN 3575
- MB 228.3, 228.31
- MTU 2.1
- Renault RLD-4
- Volvo VDS 4.5, VDS-4, VDS-3
- CID A-A-52306 / MIL-PRF-2104G

# **TYPICAL TECHNICAL PROPERTIES**

PROPERTY	TEST METHOD	10W-40 CK-4 SYN BLEND
Specific Gravity @ 15.6°C	ASTM D4052	0.868
Viscosity @ 40°C (cSt)	ASTM D445	106
Viscosity @ 100°C (cSt)	ASTM D445	15.5
Viscosity Index	ASTM D2270	155
Flash Point °C	ASTM D92	225
Pour Point °C	ASTM D5950	-38
Cold Cranking Simulator @ -25°C, cP	ASTM D5293	6700
High temp/high shear Vis @ 150°C, cP	ASTM D5481	3.5
Color	ASTM D1500	2.5
Zinc, wt %	ASTM D5185	0.125
Phosphorus, wt.%	ASTM D5185	0.112
Calcium wt. %	ASTM D5185	0.236
Sulfated Ash, wt %	ASTM D874	0.99
TBN, mgKOH/g	ASTM D2896	10

All stated properties are typical of standard production and may vary. KLONDIKE reserves the right to change product specifications and/or performance properties at its discretion and without notice.

#### **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