# KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil



#### **PRODUCT DESCRIPTION**

KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil is a premium heavy duty engine oil engineered with Million Mile additive technology and recommended for naturally aspirated and turbocharged diesel engines in which the API CJ-4 service category and SAE 10W-30 viscosity grade are specified.

#### **APPLICATIONS**

KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil is specifically engineered for 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 CJ-4 service category and SAE 10W-30 viscosity grade are specified.

KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil is typically used in the same applications as SAE 15W-40 CJ-4 but where greater fuel economy potential and better cold start efficiency is desired.

KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil also meets the requirements of Allison® C-4 for use in transmissions requiring a fluid of this type.

Some typical applications include:

- Current on-highway low emission diesel engines running on ultra-low sulfur diesel fuel.
- Current off-highway engines including those adapted for future emissions standards in construction, agriculture, marine, and mining applications.
- Heavy duty transmissions requiring fluid meeting Allison® C-4 specification.











OEM certified by:













#### **FEATURES AND BENEFITS**

KLONDIKE SAE 10W-30 CJ-4 Engine Oil is a premium heavy duty engine oil engineered to deliver outstanding wear protection and performance in modern heavy duty diesel engines. Premium base oils and carefully balanced additive technology ensure this advanced engine oil will deliver outstanding long-term performance for on- and off-highway heavy duty engine applications operating under high-load, high-stress conditions in all climates. Optimum base oil viscosity improves cold start efficiency and offers potential improvements in fuel economy as a result of lower coefficient of friction and engine drag as compared with SAE 15W-40 engine oils.

KLONDIKE SAE 10W-30 Heavy Duty Engine Oil CJ-4 contains field proven Million Mile additive technology delivering maximum control on engine wear, outstanding engine cleanliness, and high TBN and viscosity retention for outstanding lubricant life and maximum engine durability. Metal anti-wear protection exceeds API CJ-4 standards and tough OEM specifications.

KLONDIKE SAE 10W-30 Heavy Duty Engine Oil CJ-4 meets the stringent requirements of API Service Category CJ-4 in 2007 and later model 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-30 CJ-4 Heavy Duty Engine Oil delivers value through the following benefits:

- **Premium base oil** 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 viscosity retention supports extended lubricant life.
- Fuel economy lower coefficient of friction as compared with SAE 15W-40 CJ-4 oils offers potential fuel economy savings.

## KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil

#### **SPECIFICATIONS AND APPROVALS**

KLONDIKE SAE 10W-30 CJ-4 Heavy Duty Engine Oil meets the requirements of the following specifications and is recommended for use in:

- ACEA European Service Categories E9, E7
- Allison® C-4
- API Service Categories CJ-4, CI-4 PLUS, CI-4, SN
- Caterpillar® ECF-3, ECF-2
- **Cummins**® CES 20081, 20078, 20077
- Daimler MB 228.31, 228.3
- **Detroit Diesel**® Power Guard 93K218 and previous
- **Deutz** DQC 111-05

- Ford M2C171-E
- Global DHD-1
- **JASO** DH-2
- Mack® EO-O Premium Plus and previous
- MAN M 3275, 3575
- MTU Type 2.1
- Renault® VI RLD-3
- Volvo® VDS-4, VDS-3

#### **TYPICAL TECHNICAL PROPERTIES**

| PROPERTY                    | TEST METHOD | 10W-30 CJ-4 |
|-----------------------------|-------------|-------------|
| Gravity, °API               | ASTM D287   | 31.7        |
| Specific Gravity @ 15.6°C   | ASTM D4052  | 0.866       |
| Viscosity @ 40°C cSt        | ASTM D445   | 80.5        |
| Viscosity @ 100°C cSt       | ASTM D445   | 12.1        |
| Viscosity Index             | ASTM D2270  | 146         |
| CCS at -25°C, cP (7000 max) | ASTM D5293  | 6300        |
| Viscosity, MRV, @ -30°C, cP | ASTM D4684  | 23,000      |
| HTHS Vis at 150°C, cP       | ASTM D4683  | 3.5         |
| Noack Volatility, % loss    | ASTM D 5800 | 13          |
| Pour Point °C               | ASTM D5950  | -42         |
| Flash Point °C (minimum)    | ASTM D92    | 210         |
| Zinc, wt. %                 | ASTM D5185  | 0.13        |
| Phosphorus, wt. %           | ASTM D5185  | 0.127       |
| Calcium, wt. %              | ASTM D5185  | 0.12        |
| Sulfur, wt. %               | ASTM D4951  | 0.105       |
| Magnesium, wt. %            | ASTM D5185  | 0.32        |
| Molybdenum, wt. %           | ASTM D5185  | 0.1         |
| Sulfated Ash, wt. %         | ASTM D874   | 0.0066      |
| TBN, mgKOH/g                | ASTM D2896  | 10.0        |

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

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#### **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**

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