

# KOYOTO 10W-30 CK-4/SN SERIES

Advanced Performance Multigrade Fully Synthetic Diesel Engine Oil

**KOYOTO**  
LUBRICANTS

## Product Data Sheet

### Product Description

KOYOTO 10W-30 CK-4/SN series are advanced performance low-SAPS fully synthetic diesel engine oils formulated with severely refined base stocks and sophisticated technology additives to provide outstanding engine performance in the latest emission designs, including those with after treatment systems with Diesel Particulate Filters (DPF), Selective Catalytic Reduction (SCR) and Diesel Oxidation Catalyst (DOC). It may be used in both new and old diesel engines for On & Off highway applications, due to its backward compatibility down to CJ-4 specifications and may also be used in gasoline engines requiring the API SN specification. They are specifically formulated to deliver excellent wear and engine protection, extended drain capability with excellent TBN retention, outstanding high temperature performance and engine cleanliness.

### Features & Benefits

- Excellent oil consumption control, due to very oil low volatility and less oil top-up during operation.
- Outstanding oxidation & thermal stability reduces sludge deposits and keeps the engine cleaner.
- Excellent engine protection by providing outstanding protection against corrosive & abrasive wear.
- Improved shear stability maintains viscosity in-grade under severe, high temperature service conditions.
- Excellent low temperature pumpability ensures smooth cold starting and improved fuel economy.
- Excellent TBN reserves provide improved acid neutralization and corrosion protection, which helps in extending oil drain interval in both new & old engines using either low (500 ppm) or ultra-low (15 ppm) sulfur diesel fuel.

### Specifications

**KOYOTO 10W-30 CK-4/SN series meets or exceeds following International and Builder specifications:**

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, CF, CF-2, SN, SM, SL
- ACEA E9/E7-16
- MTU OIL Category 2.1
- MACK EOS-4.5/FORD WSS-M2C171-F1
- Detroit Diesel Power Guard 93K222
- CUMMINS CES 20086
- CAT ECF-3
- MB 228.31
- VOLVO VDS-4.5
- MAN 3275/3575
- Renault VI RLD-4
- Duetz DQC III-10 LA/JASO DH-2

### Typical Characteristics

| KOYOTO CK-4/SN     | Test Method | Units    | 10W-30        | 10W-40        |
|--------------------|-------------|----------|---------------|---------------|
| Density @ 15 °C    | ASTM D 4052 | gm/cc    | 0.865         | 0.870         |
| Viscosity @ 100 °C | ASTM D 445  | cSt      | 10.4          | 14.4          |
| Viscosity @ 40 °C  | ASTM D 445  | cSt      | 62.6          | 96            |
| Viscosity Index    | ASTM D 2270 | -        | 155           | 155           |
| Pour Point         | ASTM D 97   | °C       | -39           | -39           |
| Flash Point (COC)  | ASTM D 92   | °C       | 215           | 225           |
| Total Base Number  | ASTM D 2896 | mg KOH/g | 9.6           | 9.6           |
| Sulfated Ash       | ASTM D 874  | % wt     | 0.9           | 0.9           |
| CCS Viscosity      | ASTM D 5293 | cP       | 6050 @ -25 °C | 6200 @ -25 °C |

*The above figures are typical of blends with normal production tolerance and do not constitute a specification.*