











## Description

Hyrax Ultimo Premium Plus LS is the ultimate performance fully synthetic low SAPS multigrade diesel engine oils specifically designed to surpass the most stringent and most severe lubrication requirement of the latest European low-emission, heavy duty diesel engines operating under the most extreme service conditions and long drain oil intervals.

Hyrax Ultimo Premium Plus LS is specially engineered to provide excellent engine cleanliness, excellent low temperature fluidity, excellent thermal and oxidation stability and exceptional wear protection to all engine parts. Its high alkalinity reserve and special dispersant keep acidic formation and sludge deposit in crankcases under control even for long drain interval engine operation.

### **Applications**

Hyrax Ultimo Premium Plus LS is highly recommended for severe duty high-performance diesel engines including those fitted with Selective Catalyst Regeneration (SCR), Diesel Oxidation Catalyst (DOC) and Exhaust Gas Recirculation (EGR) system, both on-highway and off-highway, operating under most extreme and extended drain condition as specified by OEMs such as Mercedes Benz Actros engine.

- Excellent anti-wear and anti-scuff properties to extend engine life
- Excellent thermal and oxidation stability to minimize oil thickening, high temperature deposits, sludge build-up and oil degradation
- Exceptional detergent and dispersant properties minimize deposit formation at critical engine parts and prevent soot-induced engine wear
- Contains high alkalinity reserve for extended drain service
- Excellent shear stability properties to ensure consistent oil viscosity for optimum engine operation
- Advanced low SAPS additive technology provide outstanding protection to exhaust after treatment devices such as DPF and DOC.
- The SAE 5W-30 grade offers fuel economy benefits especially for long haul operation

### **Typical Characteristics**

| Properties                 | Method     | SAE 5W-30 | SAE 10W-40 |  |
|----------------------------|------------|-----------|------------|--|
| Density at 15°C, Kg/L      | ASTM D4052 | 0.859     | 0.864      |  |
| Flash Point, °C            | ASTM D92   | >210      | >210       |  |
| Pour Point, °C             | ASTM D97   | -39       | -36        |  |
| Viscosity at 40°C, cSt     | ASTM D445  | 70.9      | 98.7       |  |
| Viscosity at 100°C, cSt    | ASTM D445  | 12.0      | 14.6       |  |
| Viscosity Index            | ASTM D2270 | 168       | 154        |  |
| Total Base Number, mgKOH/g | ASTM D2896 | 10        | 10.1       |  |

# Performance SAE 5W-30

- API CK-4 / CJ-4 / SN
- ACEA E6 / E7 / E9
- Mercedes-Benz MB p228.51 Cummins CES 20086
- Volvo VDS-4.5
- Cat ECF-3
- Renault Truck RLD-4
- Mack E0-S-4.5
- Deutz DQC IV-10 LA
- Detroit Diesel DFS 93K222

**SAE 10W-40** 

- API CK-4 / CJ-4
  Renault Truck RLD-3
- Deutz DQC IV-10 LA

• Cat ECF-3

- ACEA E6 / E7 / E9 Mack E0-0-PP-07
  - Mercedes-Benz MB p228.51
- MTU Type 3.1
- MAN 3477 • Cummins CES 20081
- Volvo VDS-4
- Detroit Diesel DDC 93K218