

## **DISEL ENGINE OIL SAE 5W30** *(Engine Oils Formulated with 100% Synthetic Oil)*



### **DESCRIPTION**

PATROL Fully Synthetic Oil series are premium performance synthetic motor oils delivering ultimate performance and protection. It provides exceptional cleaning power, wear protection and overall performance keeping your engine running like new in all driving conditions.

### **APPLICATIONS**

- Most engine generations up to latest and most sophisticated high performance diesel engines with turbo-charger, direct injection and low emission designs, featuring all types of exhaust after-treatment technology
- Heavy duty diesel engines using low sulfur diesel fuels and many biodiesel fuel formulations
- Naturally aspirated and turbo-charged diesel powered equipment
- On-highway short-haul and long-haul trucks and buses
- Off-highway equipment

### **PROPERTIES**

PATROL Fully Synthetic Oil series are high performance engine oils specifically developed to provide the highest fuel economy and lowest CO2 emissions. These result from laboratory synthesis of precisely controlled ingredients created by oil engineers, scientists and chemists.

When combined with a high-performance additive package, this results in an oil with the highest levels of lubrication and engine protection, generally offering better protection at startup, better cleansing qualities, enhanced durability and better protection against heat buildup.

### **PRODUCT BENEFITS**

- Maximizes engine life.
- Low oil consumption.
- Excellent engine cleanliness and protection.
- Guaranteed protection from oil-related engine failure.
- High resistance to 'shear' and viscosity loss in high stress areas.

- Maximizes power and performance.
- Lower impact emissions.
- Exceptional resistance to oxidation.
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures.
- Outstanding cold flow properties for reduced wear at start up.

## RECOMMENDATIONS / SPECIFICATIONS

MEETS OR EXCEEDS

API CK-4 / SN  
 ACEA E6, E7, E9  
 Caterpillar ECF-3  
 Cummins CES 20086  
 DAF Extended Drain  
 JASO DH-2

## TYPICAL TECHNICAL PROPERTIES

Density at 15°C, g/ml, ASTM D4052	0.855
Cold Cranking Viscosity(CCS), mPas, ASTM D5293	6250@-30°C
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s, ASTM D445	69.43
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s, ASTM D445	11.93
Viscosity Index, ASTM D2270	169
Flash Point(COC), °C, ASTM D92	241
Pour Point, °C, ASTM D97	-45
Total Base Number, mg KOH/g, ASTM D2896	11
Sulphated Ash, %wt., ASTM D874, max	1.25

**Note:** These characteristics are typical of current production. While future production will conform to PATROL's specification, variations in these characteristics may occur.

**Health and Safety:** Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment

