

### Application

**Recommended for** Introduced in 2002. For high-speed, four-stroke engines designed to meet 2004 exhaust emission standards implemented in 2002. CI-4 oils are formulated to sustain engine durability where exhaust gas recirculation (EGR) is used and are intended for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, CG-4, and CH-4 oils. Some CI-4 oils may also qualify for the CI-4 PLUS designation. QUANTUM Petroleum Harrier 18000 is a Semi Synthetic is advanced performance SAE 15W-40 multigrade diesel engine oil.

An advances additive system ensures excellent control over soot induced wear, high temperature piston deposits, corrosion, foaming and oxidation stability. It also provides excellent resistance to bore polishing, a high level of wear protection and ensures superior engine cleanliness at extended drain intervals.

### Meets the Specifications of:

- APICI-4/CH-4/CG-4/CF-4/CF/SL
- ACEA E7-12(2012), ACEA E7-08
- ISSUE 2 (2010)
- MAN M 3275
- Volvo VDS-3
- MTU Type 2
- Deutz DQC III-10
- Mack EO-N , Mack EO-M Plus

- Renault Truck RLD-2
- Cummins CES 20077
- Cummins CES 20078
- ALLISON C-4
- CATERPILLER ECF 1-a
- Global DHD-1
- Detroit Diesel DDC 93K215

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Product

|Type

API CI-4Heavy Duty Vehicles EngineSAE 15W-40Oil

Characteristics	Harrier 18000
	SAE 15W-40
Density @ 15 C, kg/l	0.863
Total Base Number mgKOH/g ASTM 2896	9.59
Flash Point, C ASTM D93	186
Kinematic Viscosity @ 100 C, cSt ASTM D445	15.44
Water Content (Karl Fisher)	0.127
FTR Soot % FTR	0.6
Elemental Analysis PPM	ICP-OES
Zink	967
Aluminum	<1
Calcium	3242

The product typical may change without notice. However, the performance of the product would meet & exceed the API & OEM requirements



|Type

# API CI-4Heavy Duty Vehicles EngineSAE 15W-40Oil

### Customer Benefits

Product

- Exceeds all major American, European and Japanese OEM and Industry specifications.
- Excellent performance with extended oil drains intervals on low emission engines.
- Exceptional soot dispersions, preventing deposits on critical engine components and provide excellent protection from soot induced wear.
- Excellent TBN retention effectively extends drain interval capability.
- Excellent thermal and oxidation stability that minimized low temperature sludge build-up and high temperature deposits.

## **Recommended Oil Interval Changes**

We recommend that you follow the oil and filter change frequencies as shown in the owner's manual. The oil change intervals also can be as short as 30,000 km or as long 35,000 km on some well-maintained vehicles. With the high-performance lubricant oil, you can have the confidence to go the full mileage or time frame recommended by the vehicle manufacturer. Harrier 18000 Semi Synthetic is especially suitable for the vehicles with extended drain intervals or vehicles with oil monitoring systems that vary oil drain intervals. and this is subject to first time Quantum Engine Flush.