

## Lubricants - Engine Oil - Heavy Duty Engine Oils

Version: 110/16b

### ProFleet™ LS Engine Oil SAE 10W-40

**Premium Ultra High Performance Diesel (UHPD) full synthetic engine oil engineered to meet the latest EU standards and protect the latest after treatment systems.**

ProFleet LS Engine Oil SAE 10W-40 is a premium full synthetic engine oil engineered to meet the needs of the so-called Euro standards of the European Union. It fulfills the Ultra High Performance Diesel (UHPD) recommendations of major engine manufacturers. The unique formulation offers a lower Sulphated Ash, Phosphorus, and Sulphur content in order to protect the latest after treatment systems, such as Exhaust Gas Recirculation systems (EGR), Selective Catalytic Reduction (SCR) systems and Diesel Particulate Filters (DPF) after treatment systems. The oil is capable of providing long drain service intervals for trucks driving long distances. Suitable for Euro 1,2,3,4,5,6\* engines.

*\*Euro 6 oil recommendations differ per truck brand. Check owner's manual before use.*

#### O.E.M. Approvals

|                                |
|--------------------------------|
| MAN M 3477                     |
| MB-Approval 228.51             |
| Volvo VDS-3 (417-0002-17-1238) |
| Mack EO-N                      |
| Renault RLD-2                  |
| Scania Low Ash                 |

#### Performance levels

|                      |
|----------------------|
| ACEA E6, E7          |
| API: CI-4            |
| Cummins CES 20076/77 |
| DAF Extended drain*  |
| Deutz DQC III-10 LA  |
| Iveco 18-1804 TLS E6 |
| MAN M 3271-1         |
| MTU Type 3.1         |
| Caterpillar ECF-1-a  |

\* Check owner's manual before use

## Features & Benefits

### Applications

Suitable for heavy-duty diesel engines in trucks and buses as well as industrial vehicles. Suitable for use in high performance Euro diesel engines with Exhaust Gas Recirculation (EGR), Selective Catalytic Reduction (SCR) systems and Diesel Particulate Filters (DPF) after treatment systems. Fulfills the Ultra High Performance Diesel (UHPD) recommendations of major engine builders. Suitable for trucks and buses with extra long-drain oil refreshment periods.

### Environment

Better for the environment because of lower Sulphur, Phosphorous and Sulphated Ash content.

### Extended drains

Extended service intervals and long-drain oil refreshment periods.

### Engine cleanliness

Keeps the engine clean and in good condition over extended long drain periods. Unique formulation prevents deposit formation and protects against soot build-up.

### Wear protection

Strong oil film protects the engine against wear and corrosion.

### OEM approved motor oil

Recommended and approved by major engine manufacturers.

# PRODUCT INFORMATION



## Keeping the world moving since 1866™

Serving more than 100 countries around the globe, Valvoline is a leading marketer, distributor and producer of quality branded automotive and industrial products and services. Products include automotive lubricants; transmission fluids; gear oils; hydraulic lubricants; automotive chemicals; specialty products; greases, and cooling system products.

For more information on Valvoline products, programs and services please visit [www.valvolineeurope.com](http://www.valvolineeurope.com)

## Typical properties

Typical property characteristics are based on current production. Whilst future production will conform to Valvoline specifications, variations in these characteristics may occur.

| ProFleet LS Engine Oil                                     |        |
|--|--------|
| <b>SAE Viscosity Grade</b>                                 | 10W-40 |
| <b>Viscosity, mm<sup>2</sup>/s @ 100 °C.</b><br>ASTM D-445 | 14,5   |
| <b>Viscosity, mm<sup>2</sup>/s @ 40 °C.</b><br>ASTM D-445  | 97     |
| <b>Viscosity Index</b><br>ASTM D-2270                      | 155    |
| <b>Viscosity, mPa.s -25°C.</b><br>ASTM D-5293              | <6600  |
| <b>TBN, mg KOH/g</b><br>ASTM D-2896                        | 10,0   |
| <b>Pour Point, °C</b><br>ASTM D-5949                       | -39    |
| <b>Specific Gravity @ 15.6°C.</b><br>ASTM D-4052           | 0,861  |
| <b>Flash Point, COC, °C.</b><br>ASTM D-92                  | 232    |

**This information only applies to products manufactured in the following location(s):  
Europe**

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## Health & Safety

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet <http://sds.valvoline.com>

## Protect the environment

Take used oil to an authorized collection point. Comply with local regulations. Do not discharge into drains, soil or water.

## Storage

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

Replaces – 110/15b