

# Product Information

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Lubricants - Engine Oil - Heavy Duty Engine Oils

Version: 110/10

## ProFleet™ LS Engine Oil SAE 10W-40

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

ProFleet LS Motor Oil SAE 10W-40 is a premium synthetic motor oil engineered to meet the needs of the so-called Euro 3, 4 and 5 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 Particle Filters (DPF) after treatment systems. The oil is capable of providing long drain service intervals for trucks driving long distances (consult OEM recommendations).

### Approvals/Performance Levels

<b>SAE 10W-40</b>
API CI-4
ACEA E4-08#2, E6-08#2, E7-08#2
Caterpillar ECF-1-a
JASO DH-2-08
DAF MX engines
Deutz DQC-III-05
MAN 3477
MAN 3277 for CRT
MB-approval 228.5 , 228.51
MTU type 3.1
Renault RXD, RLD / RLD-2
Volvo VDS-3
Scania Low Ash

### Applications

Suitable for heavy-duty diesel engines in trucks and buses as well as industrial vehicles.

Suitable for use in high performance Euro 3, 4 and 5 type diesel engines with Exhaust Gas Recirculation (EGR), Selective Catalytic Reduction (SCR) systems and Diesel Particle 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.

### Features and Benefits

#### Wear protection

Strong oil film protects the engine against wear and corrosion.

#### 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

#### OEM approved motor oil

Recommended and approved by major engine manufacturers.

#### Extended drains

Extended service intervals and long-drain oil refreshment periods.

#### After treatment system protection

Suitable for EGR, SCR and DPF catalytic after treatment systems.

#### Environment

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

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## Health and Safety

This product is not likely to present any significant health or safety hazards when used correctly in the right application. A Material and Safety Data Sheet (MSDS) is available on request via your local sales office or via the internet @ <http://msds.ashland.com>

## Protect the Environment

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

## Typical Properties

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

<b>SAE Viscosity Grade</b>	10W-40
<b>Viscosity, mm<sup>2</sup>/s @ 100 °C.</b> ASTM D-445	13.5
<b>Viscosity, mm<sup>2</sup>/s @ 40 °C.</b> ASTM D-445	87
<b>Viscosity Index</b> ASTM D-2270	158
<b>Viscosity, mPa.s -25°C.</b> ASTM D-5293	<7000
<b>TBN, mg KOH/g</b> ASTM D-2896	12.0
<b>Pour Point, °C</b> ASTM D-5950	-36
<b>Specific Gravity @ 15.6°C.</b> ASTM D-4052	0.863
<b>Flash Point, COC, °C.</b> ASTM D-92	220

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

## People Who Know, Use Valvoline™

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 including MaxLife™, the first motor oil specifically formulated for higher-mileage vehicles; 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.valvolineurope.com](http://www.valvolineurope.com)

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