Product Information

Valvoline.

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Lubricants - Engine Oil - Heavy Duty Engine Oils

Version: 110/12a

ProFleet™ LS Engine Oil SAE 5W-30

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

ProFleet LS Motor Oil SAE 5W-30 is a premium full synthetic motor 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 Particle Filters (DPF) after treatment systems. The low viscosity 5W-30 and the full synthetic formulation provide fuel economy and extra long drain intervals. Suitable for Euro 1,2,3,4,5,6* engines.

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

Approvals/Performance Levels

| SAE 5W-30 |
|-------------------------------|
| API: CJ-4 |
| ACEA: E6, E7, E9 |
| Cummins CES 20081 |
| Deutz DQC IV-10 LA |
| MAN M 3677, M 3477, M 3271-1 |
| JASO DH-2 |
| MB-228.51* |
| MTU type 3.1 |
| Volvo VDS-4, VDS-3, CNG. |
| Renault RXD, RLD-3, RGD |
| Mack EO-O, EO-N, EO-M (Plus). |
| Caterpillar ECF-3 |

^{*}MB-228.31 included

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 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 longdrain oil refreshment periods.

Features and Benefits

Fuel Economy

Full synthetic low viscosity engine oil, includes excellent fuel economy properties.

Wear protection

Strong oil film protects the engine against wear and corrosion. This motor oil will flow even at very low temperatures, with that protecting the engine against wear at cold start-ups.

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

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.



Product Information





Health and Safety

This product is not likely to present any significant health or safety hazards when used correctly in the right application. A Safety Data Sheet (SDS) 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.

| SAE Viscosity Grade | 5W-30 |
|---|-------|
| Viscosity, mm ² /s @ 100 °C. | 11,45 |
| ASTM D-445 | |
| Viscosity, mm ² /s @ 40 °C. | 69,5 |
| ASTM D-445 | |
| Viscosity Index | 164 |
| ASTM D-2270 | |
| Viscosity, mPa.s –30°C. | <6090 |
| ASTM D-5293 | |
| TBN, mg KOH/g | 10,1 |
| ASTM D-2896 | |
| Pour Point, °C | -48 |
| ASTM D-5950 | |
| Specific Gravity @ 15.6°C. | 0,855 |
| ASTM D-4052 | |
| Flash Point, COC, °C. | 224 |
| ASTM D-92 | |

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

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 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.valvolineeurope.com**

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