# PRODUCT INFORMATION

*Lubricants - Engine Oil - Heavy Duty Engine Oils*

Version: **147/03**

# Premium Blue™ 8600 ES 10W-30

**Premium quality heavy duty engine oil. Uniquely formulated with synthetic base oil technology in combination with special additive technologies to offer ultimate performance and protection in Cummins applications. Formulated to also meet the latest standards of other leading engine manufacturers.**

Premium Blue 8600 ES is exclusively recommended and endorsed by Cummins and specially designed to support longer drain intervals in heavy duty applications. The advanced product technology can help to maximize engine performance and durability and consequently can help reduce maintenance costs.

| O.E.M. Approvals |
|---|
| Cummins CES 20086 |
| Deutz DQC III-10 LA |
| Mack EOS-4.5 |
| MB-Approval 228.31 |
| Renault RLD-4 |
| Volvo VDS-4.5 |
| **Performance levels** |
| ACEA E9, E7 |
| API: CK-4, CJ-4, CI-4 Plus, CI-4 |
| Cummins CES 20081 |
| Detroit Diesel 93K222 |
| JASO DH-2 |
| Mack EO-O, EO-N |
| MTU Type 2.1 |
| Renault RLD-3 |
| Volvo VDS-4, VDS-3 |

**Compatible with EGR and DPF systems**
Recommended for use in engines with Exhaust Gas Recirculation (EGR) and Diesel Particulate Filter (DPF).

**Unique extended drain**
Unique 16 000 km drain extension with premium Blue 8600 in Cummins X15 engines enabling up to 95 000 km.

**Fuel Economy**
Premium Blue 8600 ES 10W-30 provides advanced Fuel Economy up to 1.5% over 15W-40 conventional oils in on-highway operation.

**Viscosity control**
Premium Blue 8600 ES is exceeding the viscosity control of the latest API CK-4 limits by 80%, providing continued engine protection.

## Features & Benefits

**THE ONLY ONE™**
Premium Blue is THE ONLY ONE engine oil exclusively recommended and endorsed by Cummins.

**Superior acid neutralization**
Special base additives can neutralize harmful acids over a longer period (TBN retention) and can contribute to reduced engine wear, reduced breakdown risk and lower maintenance costs.

**Superior Performance**
Multiple tests have proven the superior performance of Premium Blue 8600 ES in terms of piston deposit and filter plugging reduction exceeding the API CK-4 limits.

**Exceptional oxidation**
A unique set of anti-oxidants in Premium Blue provide its superior performance. Different tests have demonstrated superior oxidation resistance that exceeds API CK-4 limits by 50%.



VALVOLINE EUROPE
WIELDRECHTSEWEG 39
3316 BG DORDRECHT
NETHERLANDS

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**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**

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

| **Premium Blue 8600 ES** | |
|---|---|
| **SAE Viscosity Grade** | 10W-30 |
| **Viscosity**, $mm^2/s$ @ 100 ºC. ASTM D-445 | 11,6 |
| **Viscosity**, $mm^2/s$ @ 40 ºC. ASTM D-445 | 76 |
| **Viscosity Index** ASTM D-2270 | 145 |
| **Viscosity**, mPa.s –25°C. ASTM D-5293 | <7000 |
| **TBN**, mg KOH/g ASTM D-2896 | 10 |
| **Pour Point, ºC** ASTM D-5949 | -45 |
| **Specific Gravity** @ 15.6°C. ASTM D-4052 | 0,869 |
| **Flash Point**, COC, ºC. ASTM D-92 | 228 |

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

**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 – 147/02

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