



# Product Information



A PRODUCT OF THE VALVOLINE COMPANY A DIVISION OF ASHLAND INC.

## Premium Blue™

104/10

Premium Blue is a global engine oil endorsed by Cummins Inc. and designed to provide advanced lubricant performance in modern, low emissions diesel engines, including those with cooled Exhaust Gas Recirculation (EGR). It is a higher Total Base Number (TBN) product designed for the latest diesel engine specification from API, ACEA, and OEMs (including Cummins) that allow for higher sulfated ash products. The advanced product technology offers a medium extended drain formulation that helps maximize engine durability.

### The Premium Blue advantages:

Enhanced protection and performance, such as higher TBN levels for long-life performance, reduced valvetrain wear and reduced oil filter restriction at high soot levels, and high temperature deposit control for pistons, and ring/liner wear protection.

Extensively tested in Cummins', as well as other Original Equipment/Engine Manufacture's (OEM), engines, and is officially endorsed by Cummins Inc.

Recommended for use in EGR, SCR (Selective Catalyst Reduction), and Euro 4 engines, but not for DPF (Diesel Particulate Filter) equipped engines.

| Approvals/performance levels      | Viscosity Grade |              |        |
|-----------------------------------|-----------------|--------------|--------|
| ACEA E7-08, E5-02, E3-96          | 15W-40          |              |        |
| ACEA B4-07, B3-04, A3-07          | 15W-40          | MAN 3275     | 15W-40 |
| API CI-4, CH-4, CG-4, CF-4, CF/SL | 15W-40          | Global DHD-1 | 15W-40 |
| Cummins CES 20078, 77, 76         | 15W-40          | ZF TE-ML 07C | 15W-40 |
| Volvo VDS-3                       | 15W-40          |              |        |
| MTU Typ 2                         | 15W-40          |              |        |
| Caterpillar ECF-2/1a              | 15W-40          |              |        |
| MB 228.3                          | 15W-40          |              |        |
| Mack EO-M Plus                    | 15W-40          |              |        |
| Renault RVI RLD/RLD-2             | 15W-40          |              |        |

| Typical Properties                     | 15W-40 |
|--|--------|
| Viscosity, mm <sup>2</sup> /s @ 100 °C | 15.0   |
| Viscosity, mm <sup>2</sup> /s @ 40 °C  | 112.9  |
| Viscosity Index                        | 135    |
| Viscosity,Pumping mPa.s -20 °C         | <7000  |
| Sulphated Ash, wt. %                   | 1.47   |
| TBN; mg KOH/g (ASTM D-2896)            | 11.5   |
| Pour Point, °C                         | -30    |
| Specific Gravity @ 15/15°C             | 0.876  |
| Flash Point, COC, °C                   | 214    |

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

|                 |           |                    |         |
|-----------------|-----------|--------------------|---------|
| Effective Date: | Replaces: | Author's Initials: | Code    |
| Jan. 2010       | 104/09    | AdG                | PBGO901 |

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