

## Mobil Delvac 1™ ESP 0W-40

Mobil Commercial Vehicle Lube, United States

HIGH PERFORMANCE ADVANCED SYNTHETIC FORMULA LOW ASH DIESEL ENGINE OIL

#### **Product Description**

Mobil Delvac 1™ ESP 0W-40 is a synthetic heavy duty diesel engine oil that was designed to protect modern diesel engines operating in severe on- and off-highway application.

This high performance engine oil meets the API CK-4 specification utilizing state-of-the-art lubricant technology to deliver exceptional performance in modern low emission engines, including those with Exhaust Gas Recirculation (EGR) and After Treatment systems with Diesel Particulate Filters (DPF's) and Diesel Oxidation Catalysts (DOC's). Mobil Delvac 1 ESP 0W-40 is recommended for use in a wide range of heavy-duty applications and operating environments found in the on-road transport and off-road, mining, forestry, construction, and agricultural industries. It can also be used in refrigeration units and older, well-maintained engines. Mobil Delvac 1 ESP 0W-40 also meets the API SN specification for gasoline engines.

### Features and Benefits

Mobil Delvac 1<sup>™</sup> ESP 0W-40 is an outstanding lubricant solution for modern and latest engine technology equipped with emission after-treatment devices. It was developed by ExxonMobil to provide exceptional wear protection in severe applications and over a broad range of temperatures. The unique formulation offers the capability to ensure proper oil flow rate at very low temperatures down to − 45°C but also provides robust oil film strength when exposed to thermal stress due to modern, high power output engine operation and high vehicle load. This feature, in combination with the sophisticated additive system, ensures exceptional engine wear performance and supports long engine life. The low ash formulation protects at the same time all exhaust after-treatment parts required to meet emissions regulations while unsurpassed oxidation stability² supports longer oil drain intervals and therefore reduced maintenance cost and vehicle downtime.

#### The key benefits of Mobil Delvac 1™ ESP 0W-40 include:

| Features   | Advantages and Potential Benefits                             |
|--|---|
| Excellent low temperature pumpability                    | Reliable engine start and wear protection at low temperatures |
| Step out wear protection                                 | Reduced engine wear to promote long engine life               |
| Unsurpassed thermal and oxidation stability <sup>2</sup> | Long oil drain intervals and prevention of deposits           |
| Superb resistance to corrosion                           | Protection of critical engine surfaces in humid environments  |

## Applications 1

Recommended by ExxonMobil for use in:

- Most engine generations up to latest and most sophisticated high performance diesel engines with turbo-charger, direct injection and low
  emission designs, featuring EGR, DPF or exhaust catalyst technology
- $\bullet \ \, \text{On-highway heavy duty trucking and off-highway including: construction, mining, quarrying, and agriculture} \\$
- On-highway applications operating in both high speed/high load and short haul pick-up/delivery
- Off-highway applications operating in severe low speed/heavy load conditions
- Modern marine high-speed diesel engines, including Caterpillar, Cummins, Volvo and others.
- High performance gasoline engines and mixed fleet operators
- Diesel-powered equipment from many global OEMs

<sup>&</sup>lt;sup>1</sup> Please refer to the owners handbook for OEM application requirements and oil drain intervals for your vehicle or equipment.

<sup>&</sup>lt;sup>2</sup> Based on PC-11 industry test data.

# Specifications and Approvals

Mobil Delvac 1™ ESP 0W-40 meets or exceeds the requirements of the following industry and builder specifications:

API CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4, SN, SM

Caterpillar ECF-3

Cummins CES 20086, 20081

Ford WSS-M2C171-F1

Mobil Delvac 1™ ESP 0W-40 meets has the following builder approvals:

Mack EOS-4.5

MTU Category 2.1

Renault Trucks RLD-4

Volvo VDS-4.5

## **Typical Properties**

| Mobil Delvac 1™ ESP 0W-40 meets          |                |
|--|----------------|
| SAE Grade                                | 0W-40          |
| Viscosity, ASTM D 445                    |                |
| cSt @ 40°C                               | 90             |
| cSt @ 100°C                              | 14.6           |
| CCS, cP, ASTM D 5293                     | 5990 @ -35°C   |
| MRV, cP, ASTM D 4684                     | 21,200 @ -40°C |
| HTHS @ 150°C, cP, ASTM D4683             | 4.1            |
| Viscosity Index, ASTM D 2270             | 176            |
| Sulfated Ash, wt%, ASTM D 874            | 1              |
| Total Base Number, mg KOH/g, ASTM D 2896 | 11             |
| Pour Point, °C, ASTM D 97                | -48            |
| Flash Point, °C, ASTM D 92               | 240            |
| Density @ 15°C kg/l, ASTM D 4052         | 0.879          |

## Health and Safety

Mobil Delvac 1<sup>™</sup> ESP 0W-40

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDSs are available upon request through your sales contact office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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