

Mobil Delvac 1 ESP 0W-40

Synthetic Supreme Performance Heavy Duty Diesel Engine Oil

Product Description

Mobil Delvac 1 ESP 0W-40 is a synthetic, supreme, performance, heavy duty diesel engine oil that helps extend engine life and improve fuel economy in modern diesel engines operating in severe applications. Mobil Delvac 1 ESP 0W-40 meets the API CJ-4 specification utilizing state-of-the-art 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). It can also be used in refrigeration units and older, well-maintained engines. 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. Mobil Delvac 1 ESP 0W-40 also meets the API SM specification for gasoline engines.

Features and Benefits

Many modern, low emission diesel engines generate more soot and operate at higher temperatures than older engines. This significantly increases the need for high performance lubricants. In addition, new engines (model-year 2007 and beyond) come equipped with After Treatment devices installed in the engine exhaust stream which will require the use of both API CJ-4 oils and ultra-low sulfur diesel fuel to function properly. Further, new engines using EGR will generate even higher levels of acid, soot and heat than older EGR engines due to substantially increased EGR rates compared to previous EGR designs. Top piston rings are located higher, bringing the oil film closer to the combustion area and exposing the lubricant to severe thermal stresses. Mobil Delvac 1 ESP 0W-40 maintains outstanding performance at significantly higher temperatures than other high performance diesel engine oils. It is also fully compatible with conventional oils. The key benefits include:

Features	Advantages and Potential Benefits
Excellent for light and heavy duty diesel engines including those with EGR and/or DPFs (Diesel particulate filters)	One engine oil for mixed fleet operations
Exceptional resistance to viscosity breakdown	Provides outstanding wear protection
Superb soot-handling performance	Helps keep engines clean
Outstanding thermal and oxidation stability	Excellent resistance to sludge build-up and high temperature deposits
Inherent stay-in-grade shear stability	Wear protection and reduced oil consumption; maintains viscosity in severe, high temperature service
Advanced formulation and viscometrics	Improved fuel economy (vs. 15W-40 grade)
Exceptional low temperature pumpability	Easy engine start-up and wear protection
Potential for extended oil-drain capability	Helps to improve operating efficiency and control overall cost



Applications

Mobil Delvac 1 ESP 0W-40 is recommended for use in 4-stroke diesel engines, including modern low emission engines with Exhaust Gas Recirculation (EGR), After Treatment systems with Diesel Particulate Filters (DPF's) and Diesel Oxidation Catalysts (DOC's). These applications include the following:

- On-highway engines operating in both high speed/high load and stop-and-go conditions
- Off-highway engines operating in severe low speed/heavy load conditions
- High performance gasoline engines and mixed fleets
- Refrigeration units

Specifications and Approvals

Mobil Delvac 1 ESP 0W-40 meets or exceeds the following industry and builder specifications:	0W-40
API CJ-4/CI-4 PLUS/CI-4/CH-4/SM	X
Caterpillar ECF-3	X
Cummins CES 20081, 20076	X
Mack EO-N Premium Plus 03	X

Typical Properties

Mobil Delvac 1 ESP 0W-40	0W-40
SAE Grade	0W-40
Viscosity, ASTM D 445	
cSt @ 40°C	87
cSt @ 100°C	15.2
Viscosity Index, ASTM D 2270	186
Sulfated Ash, wt%, ASTM D 874	0.99
Total Base #, mg KOH/g, ASTM D 2896	7.7
Pour Point, °C, ASTM D 97	-45
Flash Point, °C, ASTM D 92	215
Density @ 15°C kg/l, ASTM D 4052	0.843

Precautions

Mobil Delvac 1 ESP 0W-40 is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Special care is also recommended in handling used motor oils. A Service Data Sheet entitled "Safe Handling of Used Motor Oils" is available on request from you Imperial Oil Representative. Please refer to our Imperial Oil Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

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Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at www.imperialoil.ca/mobil or by contacting Lubricants and Petroleum Specialties, Technical Services, Technical Help Desk: 1-800-268-3183