# **Product Data Sheet**

**Mobil Delvac 1** 

**Synthetic Diesel Engine Oil** 

### **Product Description and Application**

Mobil Delvac 1, SAE 5W-40, is a heavy duty diesel engine oil formulated using unique Mobil additive and synthetic base oil technology, to give unrivalled performance. It has been specially developed with a medium ash additive system required for North American engine designs such as Caterpillar and Cummins.

Mobil Delvac 1 has been extensively tested under all operating conditions from severe on-highway service, where the engine is highly loaded and thermally stressed, to units operating at lower speed and temperatures in pick-up and delivery service. In all these applications Mobil Delvac 1 provides the following advantages:

- exceptional fuel economy performance compared to conventional mineral oils
- high resistance to oxidation and thickening which cause viscosity increases and loss of fuel economy
- resistance to soot related oil thickening which also causes loss of fuel economy performance

Mobil Delvac 1 has been designed for use in latest design heavy duty, 4-stroke cycle diesel engines, including those that are intercooled and/or turbocharged. It is particularly suitable for severe service operations in trucks, buses and off-highway contractor equipment. It is accepted by leading North American engine manufacturers for use at their highest recommended oil drain intervals, and meets the ACEA-99 E5 specification required by leading European manufacturers for long drain service. It also exceeds the severe performance requirements of Iveco/Ford, Scania, Perkins, and Detroit Diesel (4-stroke cycle engines).

API SJ gasoline engine performance has been documented in accordance with Cummins requirements for Series B and C engines, but Mobil Delvac 1 would not normally be recommended for use in passenger car applications.

### **Specifications**

Mobil Delvac 1 meets and exceeds the following specifications:

- ACEA-99 E5, E3, B4
- API CG-4, CF-4, CF
- Cummins CES 20071, 20072, 20076
- Mack EO-M
- MAN M3275
- Mercedes-Benz Sheet 228.3
- RVI RLD
- Volvo VDS-2 (in progress)

#### **Benefits**

Mobil Delvac 1 offers the following benefits:

- Maximum engine life
- Improved fuel economy (2% 3% in field tests)
- · Reduced vehicle maintenance costs
- Increased vehicle utilisation
- Excellent alkalinity (TBN) retention
- Potential for extended oil drain intervals
- Reduced oil consumption
- · Easier engine starting, especially at low temperatures
- Outstanding soot control and dispersancy reserve
- Improved environmental performance as a result of very low oil consumption, fuel economy, and emissions benefits

The engine is maintained in an "as new" condition through protection against piston ring sticking, deposit formation, bore polishing and soot related wear. The unique synthetic base fluid composition provides superior low temperature fluidity, high temperature viscosity retention and volatility control.

### **Health and Safety**

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Mobil Delvac 1

## **Typical Characteristics**

| SAE Grade   | 5W-40      |
|---|------------|
| Viscosity, cSt at 40°C                                | 93         |
| Viscosity, cSt at 100°C                               | 15.0       |
| Viscosity Index                                       | 167        |
| CCS (Cold Cranking) Viscosity, Pat -25°C              | 32         |
| MRV (Pumping) Viscosity / Yield Stress, P/Pa at -35°C | 200 / < 35 |
| High Temperature High Shear Viscosity, cP at 150°C    | 4.1        |
| Sulphated Ash % wt                                    | 1.3        |
| Total Base Number (TBN), mg KOH/g                     | 11         |
| Pour Point, °C  | <-54       |
| Flash Point, °C                                       | 240        |
| Noack Volatility, % ( CEC )                           | 10         |

Due to continual product research and development, the information contained herein is subject to change without notice

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