



## Technical Data Sheet

# Shell Rimula R6 M 10W-40 (E7/228.5)

- Maintenance Saving

## Synthetic Heavy Duty Diesel Engine Oil

Shell Rimula R6 M features advanced multi-functional additive technology in fully synthetic base oil systems to deliver highly responsive protection that continuously adapts to your driving conditions. Protection is further enhanced through formulation synergies that enhance the activity of the oil resulting in maintenance saving long drain performance coupled with excellent protection against soot induced wear, piston and engine deposits and fuel economy capability. Shell Rimula R6 M is suitable for most Euro IV and Euro V engines without Diesel Particle Filter.

## Performance, Features & Benefits

### ■ Maintenance saving

Shell Rimula R6 M meets the long oil drain requirements of leading engine makers such as Mercedes-Benz, MAN, DAF, Volvo and others to allow operators to optimize maintenance scheduling and maximize equipment availability without compromising durability.

### ■ Exceptional piston cleanliness

Shell Rimula R6 M uses advanced additive technology that builds on the reputation and performance of Shell Rimula engine oils for high levels of piston cleanliness essential for long engine life.

### ■ Low wear - long engine life

Shell Rimula R6 M meets the demanding wear protection of many European, American and Japanese engines, controlling bore polish and valve train wear thus maximising engine life.

### ■ Fuel economy

Shell Rimula R6 M can save money in fuel consumption compared to high viscosity grades.

### ■ Low emission engine use

Shell Rimula R6 M meets the requirements of most European manufacturers for Euro 2,3 engines and most Euro IV and Euro V engines without Diesel Particle Filter.

For Scania engines we recommend Shell Rimula R6 MS.

For enhanced performance and protection of the latest low emission engines, especially those fitted with exhaust diesel particulate traps (DPF), we recommend the use of our advanced low-emissions products, Shell Rimula R6 LM/LME.

## Specifications, Approvals & Recommendations

- ACEA: E7, E4
- API: CF
- Cummins: CES 20072
- Deutz: DQC IV-10
- IVECO T3 E4 (Meets Iveco specification)
- MAN: 3277
- MB Approval: 228.5
- MACK: EO-M Plus
- MTU: Category 3
- Renault trucks: RXD
- Volvo: VDS-3

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

## Main Applications



### ■ On-highway heavy duty applications

Particularly suited for a wide range of trucking and transportation applications in vehicles using modern low-emission engines from Mercedes-Benz and MAN. Also meets or exceeds the performance requirements of other European makers such as Volvo, Renault, DAF, Deutz and Iveco as well as Cummins, Mack and many Japanese engine types.

Not recommended for Caterpillar engines.

## Typical Physical Characteristics

| Properties          |        |                    | Method         | Shell Rimula R6 M 10W-40 (E7/228.5) |
|---------------------|--------|--------------------|----------------|-------------------------------------|
| Viscosity Grade     |        |                    |                | 10W-40                              |
| Kinematic Viscosity | @40°C  | mm <sup>2</sup> /s | ASTM D445      | 90                                  |
| Kinematic Viscosity | @100°C | mm <sup>2</sup> /s | ASTM D445      | 13.6                                |
| Dynamic Viscosity   | @-25°C | mPa s              | ASTM D5293     | 6600                                |
| Viscosity Index     |        |                    | ASTM D2270     | 153                                 |
| Total Base Number   |        | Mg KOH/g           | ASTM D2896     | 15.9                                |
| Sulphated Ash       |        | %                  | ASTM D874      | 1.9                                 |
| Density             | @15°C  | kg/l               | ASTM D4052     | 0.867                               |
| Flash Point         |        | °C                 | ASTM D92 (COC) | 240                                 |
| Pour Point          |        | °C                 | ASTM D97       | -42                                 |

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

## Health, Safety & Environment

### ■ Health and Safety

Shell Rimula R6 M oils are unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

### ■ Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

## Additional Information

### ■ Advice

Advice on applications not covered here may be obtained from your Shell Representative.