



#### Technical Data Sheet

- Low Emissions
- Maintenance Saving

## Shell Rimula R6 LM 10W-40 (E7/228.51)

### Synthetic Heavy Duty Diesel Engine Oil

Shell Rimula R6 LM oil features Shell exclusive "Low-SAPS" additive technology and a unique anti-wear system. Protective power is enhanced with synthetic base oil technology, resulting in long engine life and long oil life. Demonstrated in millions of km of performance, key benefits are; low emissions - helps control blockage of exhaust filters and traps, maintenance saving long drain capability, exceptional wear and cleanliness performance, versatility – for most brands of heavy duty diesel and natural gas engines.



**ENERGISED PROTECTION**  
Adapting to your engine's changing needs

### Performance, Features & Benefits

#### ■ Maintenance saving

Shell Rimula R6 LM meets the long oil drain requirements of Mercedes-Benz, MAN, DAF and others, from the latest Euro 6 to older generation engines, to allow operators to optimize maintenance schedules and control maintenance costs.

#### ■ Emissions system compatibility

Advanced low-ash formulation helps control blocking of or poisoning of exhaust after-treatment devices, helping maintain vehicle emission compliance and engine fuel efficiency.

#### ■ Low wear, low deposits

Unique additive technology delivers high levels of piston cleanliness essential for long engine life. Unique anti-wear booster helps meet the demanding wear protection requirements of most European, American and Japanese engines.

#### ■ Fuel economy

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

#### ■ Low emission engine use

Shell Rimula R6 LM meets the latest requirements of most OEMs for Euro 4, 5, 6 engines and exceeds the performance requirements of industry specifications such as ACEA E6 and API CI4.

#### ■ CNG engine oil performance

Shell Rimula R6 LM is approved for use in buses and trucks fitted with engines designed to run on 100% CNG such as those from Mercedes-Benz, MAN and Volvo.

### Specifications, Approvals & Recommendations

- Caterpillar: ECF-1-A
- Cummins: CES 20077, 72, 71
- DAF: Meets ACEA E6
- MACK: EO-N
- MAN: 3477, 3271-1
- MB Approval: 228.51, 226.9
- MTU: Category 3.1
- Renault Trucks: RLD-2
- Volvo: VDS-3, CNG
- Deutz: DQC IV-10 LA
- ACEA: E6, E7
- API: CI-4, CH-4, CG-4, CF-4, CF
- JASO: DH-2

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 modern low-emission vehicles from Mercedes-Benz, MAN, DAF, Volvo and others. Especially suitable for fleets with mixed Euro 2,3,4, 5 and 6 engine types.

## Typical Physical Characteristics

Properties			Method	Shell Rimula R6 LM 10W-40 (E7/228.51)
Viscosity Grade				10W-40
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	82
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	13
Dynamic Viscosity	@-25°C	mPa s	ASTM D5293	6650
Total Base Number		Mg KOH/g	ASTM D2896	9.5
Sulphated Ash		%	ASTM D874	0.9
Density	@15°C	kg/l	ASTM D4052	0.850
Flash Point (COC)		°C	ASTM D92	251
Pour Point		°C	ASTM D97	-39

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 LM 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.

### ■ 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.