



Shell Rimula R3 MV 15W-40 (CI-4) • Off Highway - High Power Use

Heavy Duty Diesel Engine Oil

Shell Rimula R3 MV Energised Protection oils feature modern high-performance lubricant chemistry specifically designed to protect against the changing needs of your engines. This unique adaptive technology features multi-component systems to provide: low wear for long engine life, low deposit formation to maintain engine performance and resists breakdown by heat for continuous protection in demanding applications such as those found in construction, mining and quarrying.

Shell Rimula R3 MV is especially suited for use in Caterpillar, Cummins and MTU engines.



ENERGISED PROTECTION
Adapting to your engine's changing needs

Performance, Features & Benefits

■ Hard-working protection

Shell Rimula R3 MV provides exceptional performance in modern hard-working diesel engines and provides major improvements in wear protection, deposit and viscosity control over existing or older oils typically meeting the CH-4 or ACEA E3 standard.

■ Longer oil life

The dedicated formulation of Shell Rimula R3 MV exceeds the oxidation control requirements for API and ACEA specifications for continued protection throughout the oil drain interval, even under severe conditions.

Main Applications



■ Off-highway applications

Shell Rimula R3 MV is especially designed to provide no compromise protection for the leading brands of heavy duty diesel engine found in severe duty off-highway equipment, and meets the latest specifications from Caterpillar and Cummins.

■ Emission controlled engines

The advanced formulation of Shell Rimula R3 MV offers increased performance and protection for the latest US 2002/Euro3 low emission engines.

For engines fitted with exhaust after-treatment devices such as particulate traps, we recommend use of Shell Rimula R4 L. For more information please contact your sales representative.

Specifications, Approvals & Recommendations

- Caterpillar: ECF-1A, ECF-2
- Cummins: CES 20071, 72, 78
- DDC: 93K215
- MACK: EO-M+
- MB Approval: 228.3 (meets requirements)
- MTU: Category 2
- API: CI-4, CH-4, CG-4, CF-4, CF
- ACEA: E3

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

Typical Physical Characteristics

Properties			Method	Shell Rimula R3 MV 15W-40 (CI-4)
SAE Viscosity Grade				15W-40
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	111
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	14.63
Dynamic Viscosity	@-20°C	mPa s	ASTM D5293	6343
Viscosity Index			ASTM D2270	136
Flash Point (COC)		°C	ASTM D92	230
Pour Point		°C	ASTM D97	-39
Density	@15°C	kg/l	ASTM D4052	0.886

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 R3 MV is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of 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 authorised 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.