# SHELL RIMULA R6 LM

- Low emissions
- Maintenance saving

YOU NEED THE ENGINES OF YOUR TRUCKS TO WORK RELIABLY AND EFFICIENTLY, WHETHER IN LONG-HAUL OPERATIONS OR THE SEVERE START–STOP DRIVING CONDITIONS OF SHORT-HAUL OPERATIONS. YOU ALSO WANT TO PROTECT THE PERFORMANCE OF YOUR EXHAUST EMISSIONS CONTROL SYSTEMS TO ENSURE YOUR VEHICLES COMPLY WITH LEGISLATIVE REQUIREMENTS. WHEN YOUR ENGINE OIL IS DESIGNED TO MEET THESE CHALLENGES, IT CAN HELP YOU TO

- extend oil-drain intervals
- cut maintenance costs.

## HIGH PERFORMANCE

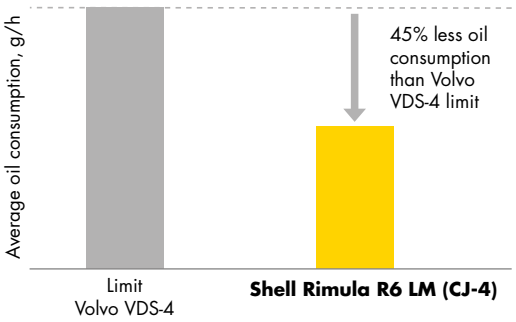
**Shell Rimula R6 LM** features low sulphated ash, phosphorus and sulphur (SAPS) additive technology and a unique anti-wear system. Its protective power is enhanced with synthetic technology that results in maintenance saving, long oil-drain capability and exceptional wear and cleanliness performance.

### Low emissions

- Low-SAPS formulation for exhaust system catalyst protection
- Designed to reduce diesel particulate filter (DPF) blocking[1]

### Maintenance saving

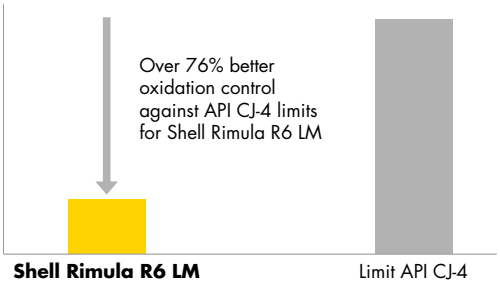
- Up to 53% better engine wear protection[2]
- Up to 45% lower oil consumption[3]




Mack T12 300-hour engine test

## CONTROLS OXIDATION FOR EXCELLENT ENGINE CLEANLINESS

Sequence IIIG oxidation test.
End of test viscosity at 40°C increase, %

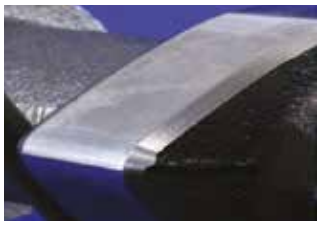



[1]Unique low-ash additive system designed to perform with DPFs
[2]Compared with the revised more stringent MB 228.51 limit, as measured in the MB OM 646 LA engine test
[3]Compared with the Volvo VDS-4 limit, as measured in the Mack T12 300-hour engine test

## ANTI-WEAR BOOSTER FOR ENHANCED DURABILITY

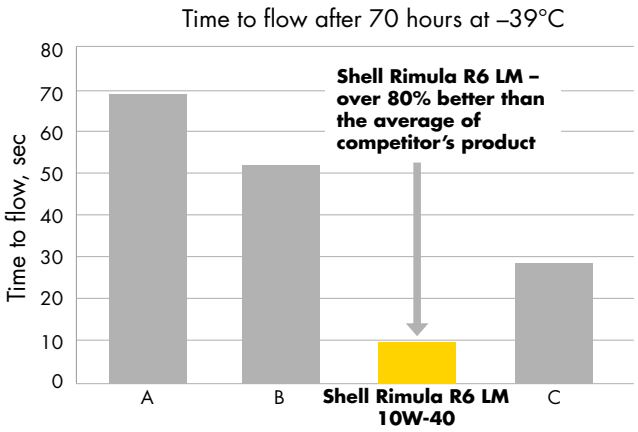
Shell Rimula R6 LM helps to protect against cam wear to keep the engine operating at optimum efficiency, as demonstrated in the results of the MB OM 646 LA engine test.

Brand new cam



Shell Rimula R6 LM in MB OM 646 LA engine test

## PROTECTS ENGINES AT LOW TEMPERATURES




In laboratory tests, Shell Rimula R6 LM flows after less than 10 sec, more than 80% faster than conventional oils.

## ADVANCED SLUDGE CONTROL

Shell Rimula R6 LM provides excellent control of sludge deposits, as demonstrated in the results of the OM 646 LA engine test for the Daimler MB 228.51, which shows a rocker cover and valve deck after testing for 300 h.

Rocker cover (OM 646 LA)

Valve deck (OM 646 LA)

## DYNAMIC PROTECTION PLUS

Shell Rimula R6 LM is formulated with Shell's innovative Dynamic Protection Plus technology. This technology features a combination of Shell's most advanced adaptive system and Shell PurePlus Technology, a gas-to-liquids synthetic base oil, which is produced by a process that converts natural gas into a crystal clear product. Dynamic Protection Plus provides outstanding engine protection:

- Its adaptive technology protects against engine wear across all terrains and weather conditions, and offers proven start-up capabilities at any temperature.
- It fights against acid and deposit build-up so that the engine is protected under all conditions.
- It helps engines to last longer across all terrains, which results in longer oil-drain intervals[4] and engine life.

[4]Proven to deliver 150,000 km oil-drain intervals based on Daimler specification MB 228.5 or 228.51

DYNAMIC PROTECTION PLUS

## THE VALUE TO YOU

Because Shell Rimula R6 LM helps to control deposits, acid corrosion and wear, it can help to extend engine life and reduce maintenance costs – to provide you with increased revenue.

| RELATIVE PROTECTION | | | |
|---|---|---|---|
| | Acid/ corrosion | Dirt and deposits | Wear |
| Shell **Rimula *R6 LM*** | ✓✓✓ | ✓✓✓✓ | ✓✓✓✓ |
| Shell **Rimula *R5 LE*** | ✓✓✓ | ✓✓✓ | ✓✓✓ |
| Shell **Rimula *R4 X*** | ✓✓ | ✓✓✓ | ✓✓½ |

Performance is a relative indication only

## REAL-WORLD VALUE

Agrimer wanted to increase the operational efficiency of its delivery trucks by extending their oil-drain intervals. As a result of changing to Shell Rimula R6 LM 10W-40, Agrimer has **increased the average oil-drain interval of its trucks by 87% from 8,000 to 15,000 km.** The company benefits from **increased fleet availability, reduced oil consumption and less scheduled maintenance,** and reports a **total annual cost saving of US$69,340.**[5]

[5]The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.

## BETTER PROTECTION FOR ENGINES WITH EGR

Exhaust gas recirculation (EGR) introduces some exhaust gas into the inlet air charge to reduce peak combustion temperatures, which lowers nitrogen oxide emissions. The exhaust gases contain acids and soot particles that can have a detrimental effect on oil performance in terms of corrosion- and soot-induced wear. EGR also leads to higher oil temperatures, which stress the oil further.

Shell Rimula R6 LM with Dynamic Protection Plus technology shows excellent performance in the severe tests on engines equipped with EGR that were introduced into the API CJ-4 specification, i.e., Mack T-12 (lead corrosion and piston ring and cylinder liner wear) and Cummins ISB (valve train wear under high soot conditions).

## SHELL RIMULA R6 LM – SUITABLE FOR

## SPECIFICATIONS AND APPROVALS

**SAE viscosity grade: 10W-40**

API: CJ-4, CI-4, CH-4, CG-4, CF-4 and CF; ACEA: E6 and E9; Caterpillar: ECF-3; Cummins: CES 20081; DAF: meets ACEA E6; DEUTZ: DQC IV-10 LA; Iveco: NG 2 (meets requirements); JASO DH-2; MACK: EO-O Premium Plus; MAN: M3477 and M3271-1; MB Approval 228.51; MTU: Category 3.1; Renault Trucks: RLD-3; and Volvo: VDS-4

## ALSO AVAILABLE

Shell Spirax gear and axle oils
Shell Spirax transmission fluids
Shell Gadus greases

For more information, please contact

**shell.com/lubricants**