

SHELL RIMULA R4 L



■ Low emissions



YOU NEED TO KNOW THAT YOUR OIL WILL PROTECT YOUR ENGINE UNDER ALL CONDITIONS. NO MATTER HOW HOT, COLD, STEEP, DUSTY, MUDDY OR EXTENDED YOUR OPERATIONS, YOU DEMAND PROTECTION.

PROTECTIVE POWER

Shell Rimula R4 L provides operators with one of the highest levels of protection achievable in a conventional viscosity grade engine oil. In addition, the low sulphated ash, phosphorus and sulphur (SAPS) formulation helps to protect the catalysts and diesel particulate filters (DPF).

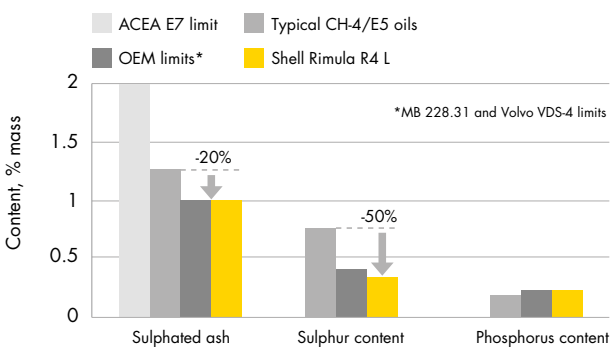
FOUR WAYS TO BENEFIT – TODAY

The introduction of Shell Rimula R4 L gives transport operators the chance to gain immediate benefits for their vehicles and business, while at the same time being ready for tomorrow. Based on high-performance Group II base oils, it is one of the most advanced 15W-40 oil technologies available¹ – and suitable for virtually all vehicles. Operators can benefit from

- improved wear and deposit control
- improved oxidation resistance (oil life)
- a wide range of approvals
- a product that meets next-generation specifications.

LOW EMISSIONS

Protecting the performance of your exhaust emissions control systems is not only important to ensure your vehicles comply with legislative requirements, but also to ensure efficient operations. For instance, blocked DPFs can actually increase fuel consumption. Shell Rimula R4 L is formulated with reduced levels of ash and sulphur to help maintain the efficiency of the latest and future vehicle technologies.

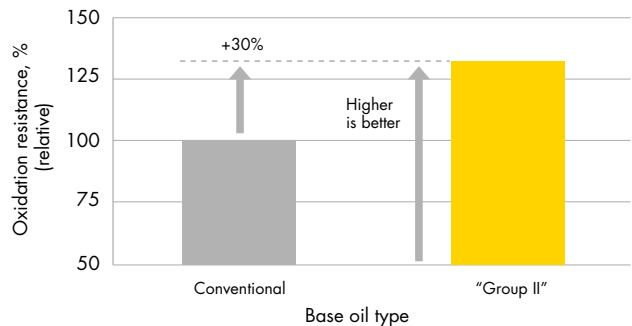


Lower "SAPS" for reduced exhaust system impact

EXTRA LIFE

Shell Rimula R4 L is formulated to give exceptional resistance to breakdown by heat and mechanical stress to ensure continuous protection, even under the most severe conditions.

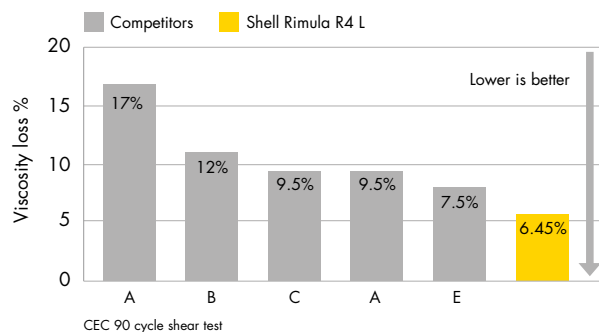
Extra heat resistance: The action of powerful antioxidants included in Shell Rimula R4 L are further enhanced through the use of high-quality Group II base oils to provide increased resistance to breakdown by heat compared to previous-generation oils (for example, ACEA E7 and API CI-4).



*Data from industry standard PDSC test using base oils with identical anti-oxidant content

Enhanced oxidation resistance from Group II base oils

Extra stress resistance: In common with other Shell top-tier heavy-duty engine oils, Shell Rimula R4 L uses highly stable viscosity modifiers. These specially designed molecules resist being torn apart in the high stress areas of the engine such as valve and gear trains. This means that the oil retains its viscosity better than many other oils on the market for more consistent and reliable lubrication and protection.



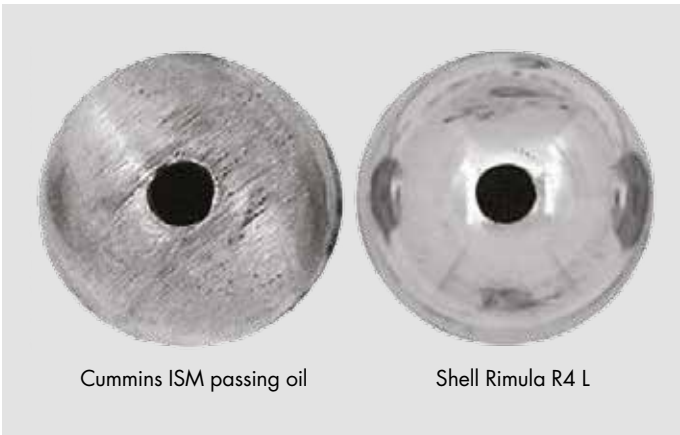
Excellent shear stability

¹Meets all available requirements (Jan 2008)

IMPROVED PROTECTION

Shell Rimula R4 L provides considerably higher levels of wear and deposit control than previous-generation oils.

Extra wear protection: In the Cummins ISM engine test² Shell Rimula R4 L not only passes the requirements but shows visibly less wear than other oils that also meet the requirements of the test.



Cummins ISM injector screw: visibly less wear

Shell Rimula R4 L provides significantly higher levels of wear protection than previous-generation oils, exceeding the critical wear requirements in many areas, such as in the Cummins ISM test² with visibly less wear than passing oils.

Virtually sludge free: Shell Rimula R4 L and its highly active ashless dispersants deliver exceptional cleanliness and deposit control and is proven in on-highway tests in over 25 million km. For example, Mercedes-Benz engines show virtually no sludge in rocker covers or oil sumps, allowing for more efficient engine operation and lower maintenance costs.



Rocker cover from Mercedes-Benz engine: excellent cleanliness after 750,000 km on-highway service

DYNAMIC PROTECTION

Shell Rimula R4 L heavy-duty diesel engine oil is formulated with adaptive additive technology that adapts physically and chemically to engines to provide Dynamic Protection in three key engine performance areas. It

- fights acids from fuel combustion that can cause corrosion and wear
- helps to control deposits and dirt in all parts of the engine
- helps to control wear through maintaining strongly protective oil films to help keep critical engine components working.



RELATIVE PROTECTION

	Acid/ corrosion	Dirt and deposits	Wear
Shell Rimula R6 LM	✓✓✓	✓✓✓✓	✓✓✓✓
Shell Rimula R4 L	✓✓	✓✓✓	✓✓✓
Shell Rimula R3 X	✓✓	✓✓	✓✓

Performance is a relative indication only



²Test included in API CJ-4, ACEA E9 (proposed) and Volvo and Mercedes-Benz low-SAPS specifications



SHELL RIMULA R4 L – SUITABLE FOR



SPECIFICATIONS AND APPROVALS

SAE viscosity grade: 15W-40

API: CJ-4, CI-4+, CI-4, CH-4, CG-4, CF-4 and CF; ACEA: E9 and E7; Caterpillar: ECF-2 and ECF-3; Cummins: CES 20081, 77, 72 and 71; DEUTZ: DQC III-10 LA; DDC: 93K218; Iveco: T2 E7 (meets requirements); MACK: EO-O Premium Plus; JASO DH-2, MAN: M3575; MB Approval 228.31; MTU: Category 2.1; Renault Trucks: RLD-3; and Volvo: VDS-4 and VDS-3

ALSO AVAILABLE

Shell Spirax gear and axle oils

Shell Spirax transmission fluids

Shell Gadus greases

For more information, please contact

shell.com/lubricants