



You need to know your oil will protect your engine under all conditions. No matter how hot, cold, steep, dusty, muddy or extended your operations. Whether you own one truck or a thousand, late models or classics, whatever your maintenance routines and procedures, Shell Rimula heavy duty engine oils can deliver the protection you demand.

#### **Technology That Adapts**

From reliable products using well-proven formulation chemistry, to unique and exclusive technologies for the latest low-emissions, severe-duty engines, we can offer the right performance and protection. Built around a deep knowledge of the operation and lubrication needs of heavy duty engines, our scientists and engineers have developed products built on technology that adapts chemically and physically to the changing conditions within the engine ensuring your engines keep running, however you choose to run your equipment or your business.



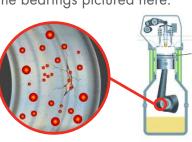
# **ABOUT ENERGISED PROTECTION**

Shell Rimula oils are ready for action when you need them to be: Shell Rimula technology lets you choose the level of protection you need in three critical areas – the areas that threaten engines the most.

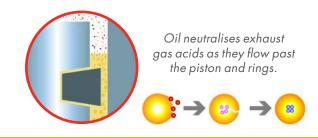
## **1. ACID CONTROL**

Acids formed when diesel fuel is burned can escape into your oil, where they corrode parts of your engine, such as the bearings pictured here.

Acid attack on bearings can cause engine failure.



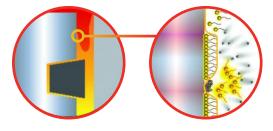
Shell Rimula oils contain powerful neutralising agents that protect the engine from attack.



**2. DEPOSIT CONTROL** 

Build-up of excessive piston deposits can result in ring sticking and abrasion, and cylinder wear. This shortens engine life and increases oil consumption. Shell Rimula Energised Protection oils contain active molecules that block or carry away particles that can cause deposits.

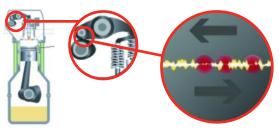




**3. WEAR CONTROL** 

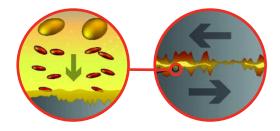
Keeping moving metal surfaces separated is a vital function of an oil. Failure can result in "hot spots" and wear.

Hot spots when lubrication breaks down.



Shell Rimula oils contain molecules that transform into protective films that keep metal surfaces apart, preventing wear.

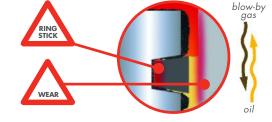
Protective films formed by anti-wear molecules in high-stress areas.



# YOUR PROTECTION - OUR EXPERTISE

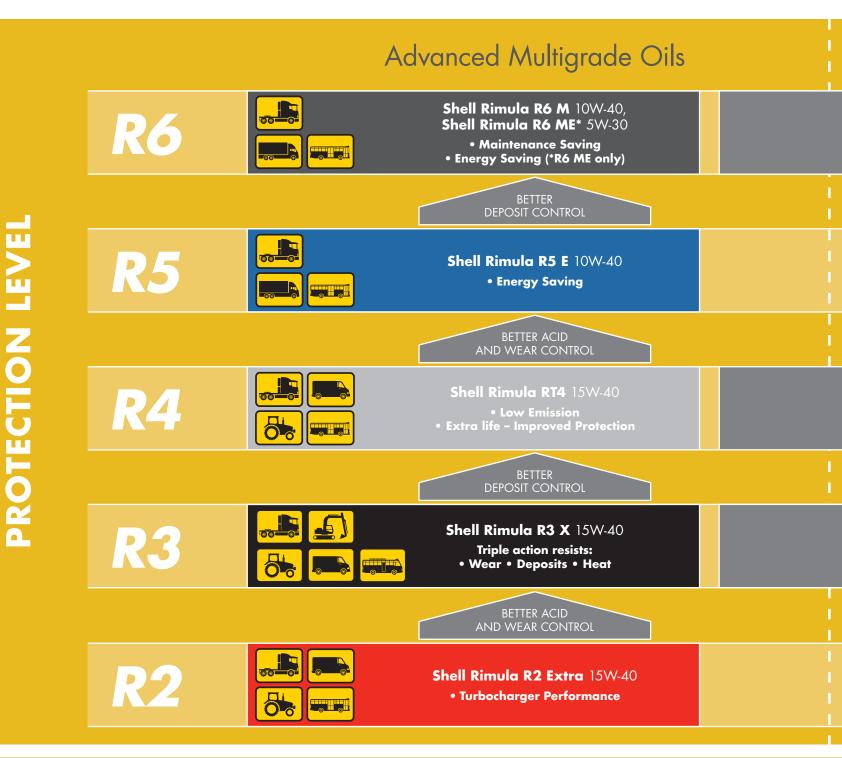
Our technologists understand how to design specific protection levels into an oil to meet specific engine and operating conditions. The Shell Rimula Energised Protection range of oils are the culmination of their expertise and skill – offering a full range of protection and performance possibilities to operators of transport equipment. Let's examine these products in detail.





### THE SHELL RI

We have designed our products to deliver a selection that is easy to understand and use. Our portfolio of Energised Protection oils mee



### WHATEVER YOUR NEEDS, THERE'S A SHELL RIMULA O







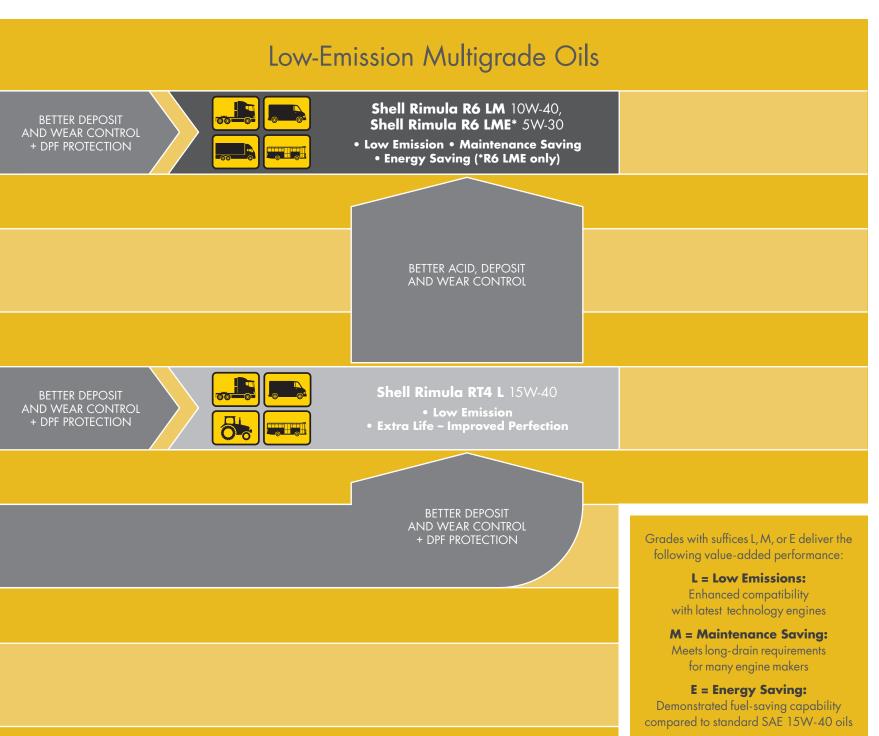
Our family of oils has a solution that is right for transport and logistics operators, from cost effective products that help minimise operating costs by extending maintenance or fuel economy performance ready for tomorrow with our latest low emissions compatible engine oils that help keep the latest E

As one of the leading suppliers of engine oil technology to bus and coach operators in Europe, w For example, Shell Rimula R6 LM is an ideal solution for operators of mixed diesel and CNG pow particulate filters as well.

Shell's extensive experience in supplying heavy duty engine oils to some of the world's leading trabe sure we'll have the right product to provide year round protection and reliability. With a wide re choice for heavy duty protection for all your on and off-highway equipment, and with approvals our new products such as Shell Rimula RT4 L are ready for the next generation of off-highway engi

### MULA RANGE

t the requirements of on and off-highway equipment, including the latest vehicles fitted with diesel particulate filters (DPF) and catalysts.



## IL TO MEET IT

re routine maintenance products such as Shell Rimula R3 X, through ace, such as Shell Rimula R6 M / Shell Rimula R6 ME. And you'll be uro IV and V trucks in peak condition, such as Shell Rimula R6 LME.

e can help identify the right product to meet your operating needs. vered vehicles – one oil for the whole fleet. It protects your exhaust

ctor, agriculture and construction equipment makers means you can ange of approvals, products such as Shell Rimula R3 X are the ideal rom leading OEMs such as Caterpillar, Cummins, Deutz and MTU, nes.





### **MAIN PRODUCT**



### Shell Rimula R6 LME 5W-30

• Low Emissions • Maintenance Saving • Energy Saving

Combining synthetic base oils for enhanced additive activity, with an exclusive anti-wear booster, our latest product represents leading edge engine oil technology for transport operators. In independent testing Shell Rimula R6 LME has been proven to reduce fuel consumption by 1.1% compared to a conventional high ash SAE 10W-40 oil\*. It provides a compelling combination of wear and deposit control, protection for the latest emissions control systems and helps control fuel costs for the operators of the latest Euro IV and V engines.

(\* Tested by Technical University of Graz, Austria – full report available on request.)



# Shell Rimula R6 LM 10W-40 Low Emissions Maintenance Saving

Synthetic base oils for enhanced additive activity in combination with our exclusive formulation technology delivers a product with excellent versatility. Proven in a wide range of equipment, Shell Rimula R6 LM is approved for use in diesel and CNG powered heavy duty vehicles by many of the world's leading OEMs including Mercedes-Benz, MAN, Volvo, Cummins and more. This exceptional combination of specifications has made Shell Rimula R6 LM a popular choice for fleet and public transport operators in Europe.



### Shell Rimula R6 M 10W-40 / R6 ME 5W-30

Shell Rimula R6 "M" series of products offer transport operators the opportunity to lower maintenance costs through use of the OEM approved drain intervals for several leading European makers including Mercedes-Benz, MAN and Volvo.



#### Shell Rimula R6 M 10W-40

• Maintenance Saving Synthetic technology formulation for excellent control of wear and deposits, even at extended maintenance intervals.

#### Shell Rimula R6 ME 5W-30

• Maintenance Saving • Energy Saving The fuel economy formulation provides the capability of helping improve fuel consumption by 2-3% versus an SAE 15W-40 oil.



#### Shell Rimula R5 E 10W-40 • Energy Saving

Suitable for most Euro III and many Euro IV engines, Shell Rimula R5 E uses synthetic technology base oil components with high performance chemistry for enhanced protection and performance beyond many conventional SAE 15W-40 products. The improved flow characteristics have been demonstrated to be able to contribute to lower fuel consumption to help control operating costs, and to faster lubrication of critical engine parts in cold-start operations, to control wear for long engine life.

## S AND BENEFITS



#### Shell Rimula RT4 L 15W-40 • Low Emissions • Extra Life – Improved Protection

Combining the latest additive technology for low emissions engines with low sulphur "Group II" base oils, Shell Rimula RT4 L represents a major step forward for conventional SAE 15W-40 engine oils. Key benefits compared to previous generation oils are improved wear protection, improved deposit control and low- SAPS formulation technology for protection of exhaust after-treatment systems such as diesel particulate filters. Already meeting the requirements of the next generation of oil specifications, including ACEA E9\*, API-CJ-4, Mercedes-Benz 228.31 and Volvo VDS-4, Shell Rimula RT4 L offers today's engines enhanced protection and performance, whilst being ready for the next generation of low-emission vehicles.

(\* Meets all engine test requirements in draft ACEA E9 specification.)



# Shell Rimula RT4 15W-40 Unique Active Technology Modern Engine – High Power Use

Shell Rimula RT4 Energised Protection oil uses exclusive combinations of the latest high performance additives to ensure that the oil adapts and protects under the full range of pressures and temperatures found in modern engines – from the high temperatures in the pistons, to the extreme loads found in the valve-trains. Featuring extra-active additives to control and sweep away harmful soot and particles found in high performance engines, it delivers excellent soot and viscosity control, outstanding protection against wear and exceptional versatility, one oil for fleets with multiple engine and vehicle makes and ages. Suitable for most Euro I-III and some Euro IV engines types.



#### Shell Rimula R3 X 15W-40 • Triple Action – Resists: • Wear • Deposits • Heat

Tested in over 18 million km of documented real-world service, Shell Rimula R3 X has been shown to protect in three key areas giving lower wear, improved deposit and sludge control combined with resistance to breakdown by heat compared to previous generation oils\*. Shell Rimula R3 X is an ideal choice for most on and off-highway equipment running in heavy duty service. (\* Eg API CG-4 quality oils.)



# Shell Rimula R2 Extra 15W-40 • Turbocharger Protection

With up to 20% more deposit fighting additives than basic API CF-4 oils, Shell Rimula R2 Extra provides excellent protection against deposits in hotter, higher powered turbocharged engines (compared to non-turbocharged applications). These oils are suitable for older turbocharged engines.

# CAN'T FIND WHAT YOU ARE LOOKING FOR?

For more information on these products or on other products for Shell, contact your Shell representative or visit our electronic product catalogue at **www.shell.epc.com** 

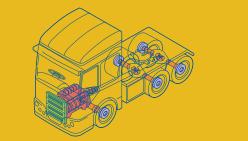


### **PRODUCT PERFORMANCE**

The Shell Rimula Energised Protection range of oils has products to meet virtually all the requirements and approvals of the world's leading manufacturers of heavy duty engines including Caterpillar, Cummins, Mercedes-Benz, Volvo and many others.

PRODUCT	VISCOSITY GRADES	KEY BENEFITS	SPECIFICATIONS AND APPROVALS
Shell Rimula R6 LME	5W-30	<ul> <li>Low Emissions</li> <li>Maintenance Saving</li> <li>Energy Saving</li> </ul>	ACEA: E6, E7; Cummins: CES 20077; MAN: 3477; MB Approval: 228.51
Shell Rimula R6 LM	10W-40	<ul> <li>Low Emissions</li> <li>Maintenance Saving</li> </ul>	ACEA: E7, E6, E4; API: CI-4, CH-4, CG-4, CF-4; Caterpillar: ECF-1-A; Cummins: CES 20077; Mack: EO-M+; MAN: 3477, 3271-1; MB Approval: 228.51, 226.9; MTU: Category 3.1; DAF: Meets ACEA E6 & E4-99 Renault Trucks: RD-2; Volvo: CNG, VDS-2
Shell Rimula R6 ME	5W-30	<ul> <li>Maintenance Saving</li> <li>Energy Saving</li> </ul>	ACEA: E4; API: CF; DAF: HP-1/2; MAN: 3277; MB Approval: 228.5; MTU: Category 3; Volvo: VDS-2
Shell Rimula R6 M	10W-40	Maintenance Saving	ACEA: E7, E4; API: CF; Cummins: CES 20077; MAN: 3277; MB Approval: 228.5; MTU: Category 3; Renault trucks: RXD; Volvo: VDS-3, Scania: LDF-2
Shell Rimula R5 E	10W-40	• Energy Saving	API: CI-4, CH-4, CG-4, CF-4; ACEA: E7, E5, E3; Global: DHD-1; Cummins: CES 20078, 77, 76, 72, 71; Mack: EO-M, EO-M+; MAN: 3275; MB Approval: 228.3; Renault Trucks: RLD-2; Volvo: VDS-3, VDS-2
Shell Rimula RT4 L	15W-40	<ul> <li>Low Emissions</li> <li>Extra Life –</li> <li>Improved Protection</li> </ul>	API: CJ-4, CI-4+, CI-4, CH-4, CG-4, CF-4, ACEA E7, E9 Ready*; Caterpillar: ECF-2, ECF-3; Cummins: CES 20077, 81; DDC: 93K218; Deutz: DQC-III; MACK: EO-O PP; MAN: 3275; MB Approval: 228.3, 228.31; MTU: Catagory 2; Renault Trucks: RLD-3; Volvo: VDS-4, VDS-3;
Shell Rimula RT4	15W-40	<ul> <li>Unique Active Technology</li> <li>Modern Engine – High Power</li> </ul>	API: CI-4,CH-4, CG-4, CF-4, CF; ACEA: E7, E5, E3; Global: DHD-1; Caterpillar: ECF-1-A; Cummins: CES 20078, 77, 76, 75, 72, 71; DDC: 93K215; Mack: EO-M, EO-M+; MAN: 3275; MB Approval: 228.3; Renault Trucks: RLD-2; Volvo: VDS-3
Shell Rimula R3 X	15W-40	Triple Action – Resists: • Wear • Deposits • Heat	API: CH-4, CG-4, CF-4, CF; ACEA: E5, E3; Caterpillar: ECF-1-A; Cummins: CES 20071, 72, 75, 76, 77; DDC: 93K215; Mack: EO-M, EO-M+; MAN: 3275; MB Approval: 228.3; MTU: Category 2; Renault Trucks: RD-2; Volvo: VDS-2
Shell Rimula R2 Extra	15W-40	• Turbocharger Performance	API: CF-4, CF; ACEA: E2; MAN: 271; MB Approval: 228.1; Volvo: VDS

Specifications and approvals may vary with viscosity grade. \*Meets all available requirements (Jan 2008).









In addition to the full range of Shell Rimula heavy duty engine oils, Shell also offers a complete portfolio of lubricants for every part of your equipment, including Shell Spirax gear and axle oils, Shell Donax automatic transmission fluids, Shell Retinax heavy duty greases and Shell GlycoShell Antifreeze/Coolant.

