

### SHELL RIMULA R6 LM - APPLICATION GUIDE



Shell Rimula R6 LM engine oils are suitable for use in many on-highway heavy duty applications. Meeting the requirements of many US, European and Japanese engine makers, they are particularly suited for a wide range of trucking and public transportation applications in modern low-emission vehicles, in particular fleets with mixed brands of engines and ages of vehicles.



Shell Rimula R6 LM is suitable for virtually all makes of Euro 4 and 5 vehicles.

Shell Rimula R6 LM exceeds the performance requirements of industry specifications such as API CI-4, ACEA E6 and E7 and is particularly recommended for vehicles fitted with diesel particulate filters (DPFs).

#### **SPECIFICATIONS AND APPROVALS**

## **SAE Viscosity Grade: 10W-40**

ACEA:E7, E6,E4-99; API: CI-4, CH-4, CG-4, CF-4; Caterpillar: ECF-1-A; Cummins: CES 20077; DAF: Meets ACEA E6 & E4-99; Mack: EO-M+; MAN: 3477, 3271-1; Mercedes Benz Approval: 228.51, 226.9; MTU;

Category 3.1; Renault Trucks: RD-2;

Volvo: CNG, VDS-2.

Shell reserves the right to modify any approvals and specifications without notice. Please visit www.shell.com.au for up-to-date information.

# **OUR COMPLEMENTARY RANGE**

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 transmission fluids, Shell Retinax greases, and Shell HD Antifreeze/ Coolant.

### **HEALTH, SAFETY & ENVIRONMENT**

For guidance on correct handling, application and disposal of this product refer to the Material Safety Data Sheet, which is available by contacting Shell on 13 16 18 or visiting www.shell.com.au



For more information contact your Shell representative or ring 13 16 18.





# SHELL RIMULA **ENERGISED**PROTECTION





### **ABOUT ENERGISED PROTECTION**

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, you demand protection.

The Energised Protection of Shell Rimula heavy duty diesel engine oils is designed to provide protection in three critical areas:

- **1. Acid control** protect against corrosion from acids formed as fuel burns
- **2. Deposit control** designed to keep engines clean for optimum performance and long life
- **3. Wear control** keep moving metal engine surfaces apart for long engine life

Shell Rimula R6 LM provides an innovative technology solution to meet the technical and operational needs of diesel and CNG powered heavy duty truck and bus fleet operators. Providing versatile protection Shell Rimula R6 LM can help contribute to efficient transport operation through:



Low Emissions: Catalyst and particulate filter compatible to help maintain performance and life of the vehicle emission system.



Maintenance Saving: Long drain capability and versatility to help manage maintenance and inventory costs and reduce waste oil.

Please note that the actual product container(s) may differ from those pictured.

#### **PROTECTIVE POWER**

Shell Rimula R6 LM uses a three-fold approach to delivering protection:

- Synthetic technology base oils for increased additive activation
- Unique additive technology
- Exclusive anti-wear booster

Working together these deliver outstanding performance and long drain capability without compromising durability. The low-SAPS formulation also protects exhaust catalysts and helps control deposit formation in CNG powered engines making this an ideal choice for operators of mixed fuel, low emissions trucks and buses.

### **YOUR PROTECTION - OUR EXPERIENCE**

Shell technologists have developed a novel anti-wear booster that provides extra protection in highly stressed areas. In laboratory simulations, this system can help reduce wear by up to 50%.

Hot spots form when lubrication breaks down. A novel anti-wear

















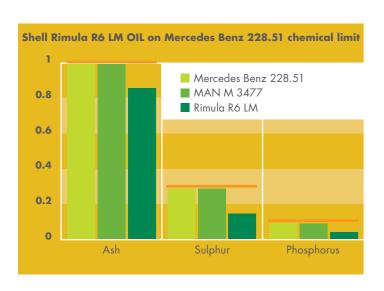


RELATIVE PROTECTION				
		Acid/ Corrosion	Dirt & Deposits	Wear
	Shell <b>Rimula R6 LM</b> • Low Emissions • Maintenance saving	<i>\\\\</i>	<b>VV VV</b>	<b>VV VV</b>
	Shell <b>Rimula R6 M</b> • Maintenance saving	<i>\\\\</i>	<i>\\\\</i>	<i>&gt;&gt;&gt;</i>
	Shell <b>Rimula R4 L</b> • Low Emissions • Extra Life-improved Protection	<b>//</b>	<b>///</b>	<i>\\\\</i>

### **LOW EMISSIONS**

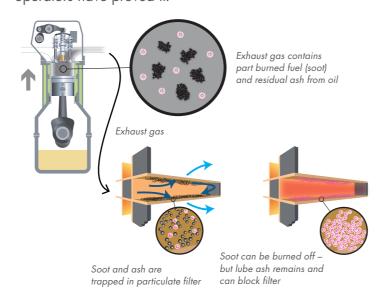
Protecting the performance of your exhaust emissions control systems is not only important to ensure your vehicles comply with legislative requirements, but also to ensure efficient operations. For instance, blocked diesel particulate filters (DPF) can actually increase fuel consumption. Shell Rimula R6 LM is formulated with reduced levels of ash and sulphur to help maintain the efficiency of the latest and future vehicle technologies.

Exceeding the requirements for limiting of sulphur and phosphorous content for Mercedes-Benz, MAN and other OEMs, Shell Rimula R6 LM has been tested and proven to protect.



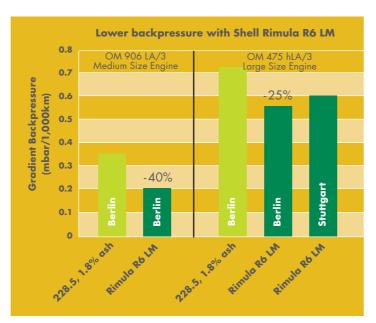
# **EMISSIONS CONTROL - BENEFITS**

The impact of using the wrong oil on the life of exhaust emissions systems such as diesel particulate filters is real and can impact maintenance costs and fuel efficiency. Our tests in conjunction with DPF suppliers and transport operators have proved it.



## **Impact in Practice**

Our field trials have confirmed that, compared to conventional high ash – long drain oils (typically meeting ACEA E4/Mercedes Benz 228.5), Shell Rimula R6 LM can slow the rate of DPF blockage, meaning lower back pressure (see below) which in turn means less DPF maintenance and/or less impact on fuel economy.



### **MAINTENANCE SAVING**

Shell Rimula R6 LM can help control maintenance costs through

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**Longer Oil Drains** – Less time in the workshop **Increased Engine Durability** – Less



unplanned maintenance



**Simplified Engine Oil Inventory** – One oil for virtually all brands of engine, diesel and CNG.

The excellent performance of Shell Rimula R6 LM in the critical piston deposit tests used my engine makers such as Mercedes-Benz and MAN has allowed approval against these and other extended drain specifications (see below).



#### Shell Rimula R6 LM: Versatile Long-Drain Piston Cleanliness Performance



Mercedes-Benz OM 441LA Test



**MAN CNG Approval Field Trial** 

The excellent wear performance of Shell Rimula R6 LM together with piston and crankcase deposit control helps deliver long and reliable engine life. For instance, it clearly exceeds the requirements for the Mercedes-Benz OM 602A wear test.



