Technical Data Sheet

- *Low Emissions*
- *Maintenance Saving*

Shell **Rimula** *R5 LM 10W-40 (E6/228.51)*

Synthetic Technology Heavy Duty Diesel Engine Oil

Shell Rimula R5 LM Energised Protection oil features "Low-SAPS" additive technology for increased compatibility with the latest exhaust emissions control systems. Protective power is further energised by the use of a highly active additive technology enhanced with synthetic technology base oils that further enhances the oil performance to deliver responsive protection that continuously adapts to your driving conditions resulting in maintenance saving long oil drain capability.

ENERGISED PROTECTION
Adapting to your engine's changing needs

Performance, Features & Benefits

- **Emissions system capability**
  Advanced low-ash formulation helps control blocking of or poisoning of exhaust after-treatment devices, helping maintain vehicle emission compliance and engine fuel efficiency.
- **Maintenance saving**
  Shell Rimula R5 LM has been formulated to meet the long oil drain requirements of Mercedes-Benz and MAN to allow operators to optimize maintenance scheduling.
- **Improved engine cleanliness**
  The advanced formulation delivers good engine cleanliness and protection against piston deposits allowing Shell Rimula R5 LM to ensure engine and component reliability at extended oil drain intervals.
- **European heavy duty engines**
  Shell Rimula R5 LM provides protection and performance in modern high power heavy duty diesel engines from leading European engine makers such as Mercedes-Benz and MAN and where oils meeting ACEA E6 are called for.
- **Low emission engine use**
  Shell Rimula R5 LM meets the requirements of Mercedes-Benz, MAN and other manufacturers for modern engine applications.

Specifications, Approvals & Recommendations

- MAN: M3477
- MB Approval: 228.51
- ACEA: E6

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

Main Applications

Typical Physical Characteristics

Properties			Method	Shell Rimula R5 LM 10W-40 (E6/228.51)
Viscosity Grade				10W-40
Kinematic Viscosity	@40°C	mm²/s	ASTM D445	81
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	12.8
Dynamic Viscosity	@-25°C	mPa s	ASTM D5293	6600
Viscosity Index			ASTM D2270	158
Total Base Number		mg KOH/g	ASTM D2896	9.7
Sulphated Ash		%	ASTM D874	0.9
Density	@15°C	kg/l	ASTM D4052	0.851
Flash Point (COC)		°C	ASTM D92	248
Pour Point		°C	ASTM D97	-45

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 R5 LM 10W-40 (E6/228.51) 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.