Technical Data Sheet

- Low Emissions
- Energy Saving

Shell **Rimula** *R5 LE 10W-40*

Advanced Performance Heavy Duty Diesel Engine Oil

Shell Rimula R5 LE oils feature "Low-SAPS" additive technology while delivering energy savings. Protective power is enhanced through the use of advanced base oils to deliver fuel economy performance with no compromise in durability.

DYNAMIC PROTECTION PLUS

Performance, Features & Benefits

- **Emissions system capability**

  Advanced low-ash formulation helps control the blocking or poisoning of exhaust after-treatment devices, helping maintain vehicle emission compliance and engine fuel efficiency.

- **Fuel economy capability**

  The use of advanced base oil components provides Shell Rimula R5 LE with the capability to improve cold starting and reduce fuel consumption and save money, without compromising engine protection or durability.

- **Improved engine cleanliness**

  The advanced formulation delivers good engine cleanliness and protection against piston deposits allowing Shell Rimula R5 LE to ensure engine and component reliability at extended oil drain intervals.

Main Applications

- **European heavy duty engines**

  Shell Rimula R5 LE 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 E11 are called for.

- **Low emission engine use**

  Shell Rimula R5 LE meets the requirements of the major European and North American engine manufacturers for low emission applications.

- Shell Rimula R5 LE is suitable for use with biodiesel per the OEM recommended oil drain intervals.

Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, SN
- ACEA E7, E9, E11
- JASO DH-2
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, CES 20081
- DTFR 15C100
- Deutz DQC III-18 LA
- Detroit Fluids Specification (DFS) 93K222, 93K218
- Ford WSS-M2C171-F1
- IVECO 18-1804 Class TLS CK4, Class TLS E9
- MACK EO-S 4.5, EO-O Premium Plus
- MAN M 3775
- MTU Category 2.1
- Renault VI RLD-3
- Volvo VDS-4.5
- CNH MAT 3521 (Meets specification)

  For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Rimula R5 LE 10W-40
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	102
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	14.8
Dynamic Viscosity	@-25°C	mPa s	ASTM D5293	6 500
Viscosity Index			ASTM D2270	152
Total Base Number		mg KOH/g	ASTM D2896	10
Sulphated Ash		%	ASTM D874	1
Density	@15°C	kg/l	ASTM D4052	0.862
Flash Point (COC)		°C	ASTM D92	237
Pour Point		°C	ASTM D97	-42

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 LE 10W-40 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 Safety Data Sheet, which can be obtained from https://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.