Shell Rimula **R4 L 15W-40 (CJ-4)**

**Multigrade Heavy Duty Diesel Engine Oils**

Shell Rimula R4 L Energised Protection oils use the latest "Low-SAPS" additive technology to protect under the most severe conditions found in modern low emission engines. The protective power of the oil is enhanced through the use of high purity "Group II" base oils that provide increased additive activity. It delivers significant improvements in wear protection, deposit control and resistance to breakdown under high temperatures*. The exclusive low-ash formulation helps protect the exhaust catalysts and particulate traps found on the latest low emission vehicles. Recommended by a wide range of OEMs, suitable for both the latest low-emissions (Euro 4,5, US 2007) and older model equipment.

* compared to previous generation oils such as API CI-4 and ACEA E7

### Performance, Features & Benefits

- **Simplify inventory needs**
  Shell Rimula R4 L is approved by a wide range of leading OEMs, simplifying inventory needs for fleets with a mixture of engine makes.

- **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.

- **Lower operating costs**
  Shell Rimula R4 L is formulated with an enhanced acid-control system to help fleet operators to achieve maximum drain flexibility.

- **Outstanding wear protection**
  Demonstrated over millions of km of customer service, Shell Rimula R4 L provides significantly higher levels of wear protection than previous generation oils to prolong engine efficiency and life.

### Main Applications

- **Severe duty heavy duty diesel engines**
  Shell Rimula R4 L is our highest performance 15W-40 HD oil providing outstanding protection for virtually all engines including the latest Euro 5 and US 2007 as well as older units.

### Specifications, Approvals & Recommendations

- **Caterpillar**: ECF-2, ECF-3
- **Cummins**: CES 20081, 77, 72, 71
- **DDC**: 93K218
- **Deutz**: DQC III-05
- **M A C K**: EO-O - Premium Plus
- **M A N**: M 3275
- **M B Approval**: 228.31,
- **M T U**: Category 2
- **Renault Trucks**: RLD-3
- **J A S O**: DH-2
- **IVECO**: T2 E7 (Meets specification)
- **Volvo**: VDS-4, VDS-3
- **A P I**: CJ-4, CI-4+, CI-4, CH-4, CG-4, CF-4, CF
- **ACEA**: E9, E7

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

<table>
<thead>
<tr>
<th>Properties</th>
<th>Method</th>
<th>Shell Rimula R4 L 15W-40 (CJ-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity Grade</td>
<td></td>
<td>15W-40</td>
</tr>
<tr>
<td>Kinematic Viscosity @40°C</td>
<td>mm²/ s</td>
<td>ASTM D445</td>
</tr>
<tr>
<td>Kinematic Viscosity @100°C</td>
<td>mm²/ s</td>
<td>ASTM D445</td>
</tr>
<tr>
<td>Viscosity Index</td>
<td></td>
<td>ASTM D2270</td>
</tr>
<tr>
<td>Density @15°C</td>
<td>kg/l</td>
<td>ASTM D4052</td>
</tr>
<tr>
<td>Sulphated Ash</td>
<td>%</td>
<td>ASTM D874</td>
</tr>
<tr>
<td>Total Base Number</td>
<td>mg KOH/g</td>
<td>ASTM D2896</td>
</tr>
<tr>
<td>Flash Point (CO C)</td>
<td>ºC</td>
<td>ASTM D92</td>
</tr>
<tr>
<td>Pour Point</td>
<td>ºC</td>
<td>ASTM D97</td>
</tr>
</tbody>
</table>

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 R4 L 15W-40 (CJ-4) 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.