Shell Vacuum Pump Oil S2 R 100: Reliable Protection Standard Applications

Rotary Vacuum Pump Oil

Shell Vacuum Pump Oil S2 R is formulated from selected premium performance, highly refined mineral oils. This provides the low vapour pressure and high performance, desired for the effective lubrication of rotary vacuum pumps.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Long life oil - maintenance saving
  Shell Vacuum Pump Oil S2 R is formulated to provide excellent resistance to oil degradation. This ensures the oil will provide a long service life as well as reduced tendency for sludge build up and deposit formation.

- Outstanding wear and corrosion protection
  Shell Vacuum Pump Oil S2 R helps provide effective protection of internal metal surfaces from corrosion and wear.

- Maintaining system efficiency
  The selection of low vapour pressure base oils with a narrow boiling range enables the pump to efficiently work at the vacuum for which it is designed over the extended maintenance period.

Main Applications

- Rotary vacuum pumps
  Shell Vacuum Pump Oil S2 R is designed for the use in rotary and sliding vane vacuum pumps. It can be used to provide low vacuum pressures. It is suitable for most industrial rotary vacuum pump applications.

- Standard operating environments
  Shell Vacuum Pump Oil S2 R is suitable for applications where ambient temperatures are above 0°C and where maximum operating temperatures do not exceed 100°C. Maximum vacuum pressure capability generally tends to decrease as the pump operating temperatures increase.
  Shell Vacuum Pump Oil S2 R 100 is suitable for vacuum pumps working in a vacuum range of 100 mbar – 10-2 mbar.
  Shell Vacuum Pump Oil S2 R is not recommended for use when corrosive gasses or chemical vapours are involved in the extraction process.

Specifications, Approvals & Recommendations

- ISO 6743-3A-DVC

- Shell Vacuum Pump Oil S2 R has been used extensively by major OEMs throughout the world.

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

Typical physical characteristics

<table>
<thead>
<tr>
<th>Properties</th>
<th>Method</th>
<th>Shell Vacuum Pump Oil S2 R 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO Viscosity grade</td>
<td>ISO 3448</td>
<td>100</td>
</tr>
<tr>
<td>Kinematic Viscosity @40°C</td>
<td>cSt</td>
<td>ASTM D445</td>
</tr>
<tr>
<td>Kinematic Viscosity @100°C</td>
<td>cSt</td>
<td>ASTM D445</td>
</tr>
<tr>
<td>Density @15°C</td>
<td>kg/m³</td>
<td>ASTM D1298</td>
</tr>
<tr>
<td>Flash Point COC @40°C</td>
<td>°C</td>
<td>ASTM D92</td>
</tr>
<tr>
<td>Pour Point @40°C</td>
<td>°C</td>
<td>ASTM D97</td>
</tr>
<tr>
<td>Neutralisation value</td>
<td>mg KOH/g</td>
<td>ASTM D947</td>
</tr>
<tr>
<td>Ash, sulphated</td>
<td>%</td>
<td>DIN 51575</td>
</tr>
<tr>
<td></td>
<td></td>
<td></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 Vacuum Pump Oil S2 R 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 your Shell representative.

- **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.