Shell Gadus S2 OG 40

Superior Performance Open Gear Greases

Shell Gadus S2 OG greases are a range of premium quality lead and solvent free, full EP lubricants developed for the lubrication and protection of open gears and wire ropes subjected to extremes of ambient temperature and operating conditions. They are a unique blend of high quality paraffinic mineral and synthetic base oils with carefully selected additives to provide optimum performance. Its balanced formulation allows the lubricant to stay soft and pliable over long periods, thus eliminating the build-up of lubricant in the roots of the gear teeth.

**Performance, Features & Benefits**

- **Exceptional physical and mechanical stability**
  Shell Gadus S2 OG retains its natural protective properties over its long working life.

- **Excellent anti-wear performance**
  At working temperatures, speeds and pressures, Shell Gadus S2 OG forms a protective cushion between the large gear (girth, bull etc) and pinion teeth.

- **Superb load carrying capacity**
  Molybdenum disulphide and other solid lubricants combine to reduce tooth contact zone temperatures, reduce gear surface pitting and alleviate 'stick-slip' conditions.

- **Water repellent**
  Effectively resists water 'wash-off' by immersion or spray.

- **Corrosion protection**
  Protects metal surfaces from corrosion in hostile environments such as salt-water conditions. Repels dirt and dust.

- **Environmental compliance**
  Lead and solvent haven't been added intentionally to Shell Gadus S2 OG 40.

**Main Applications**

- Heavily loaded open gears, particularly those found in grinding mills, kilns, shovels, draglines, ship loaders, stackers and reclaimers and excavator applications. When choosing a product to suit your ambient temperature conditions, always consult with your Shell representative for the appropriate grade.

- Multi service lubricant that can be used as the one grease (multi purpose and open gear) for the entire machine on most shovels, excavators and draglines (excluding electrical motors bearings).

- Surface dressing of slow moving gears open to the atmosphere.

- Plain bearings, pivot pins/bushings & articulations found in earth moving equipment.

- Mooring, static and slow moving wire ropes including those intermittently immersed in salt water.

- Wide variety of heavy-duty mining and industrial applications.

**Specifications, Approvals & Recommendations**

- Lincoln

  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 Gadus S2 OG 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Soap Type</td>
<td>Clay</td>
<td></td>
</tr>
<tr>
<td>Base Oil Kinematic Viscosity @100°C</td>
<td>ASTM D445</td>
<td>40</td>
</tr>
<tr>
<td>Base Oil Kinematic Viscosity @40°C</td>
<td>ASTM D445</td>
<td>655</td>
</tr>
<tr>
<td>Flash Point COC @40°C</td>
<td>ASTM D92 / ISO 2592</td>
<td>min 130</td>
</tr>
<tr>
<td>Four Ball Extreme Pressure Test, Weld Load</td>
<td>ASTM D2596</td>
<td>6200</td>
</tr>
<tr>
<td>Four Ball Extreme Pressure Test, Scar Diameter</td>
<td>ASTM D2266</td>
<td>max 0.67</td>
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<tr>
<td>Timken, OK Load (without solids)</td>
<td>ASTM D2509</td>
<td>min 50</td>
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<tr>
<td>Copper Strip Corrosion rating</td>
<td>ASTM D4048</td>
<td>1b max</td>
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<tr>
<td>Rust Protection</td>
<td>ASTM D1743</td>
<td>Pass</td>
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<tr>
<td>Falex Continuous Load, Failure</td>
<td>ASTM D3233</td>
<td>min 20450</td>
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</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 Gadus S2 OG Grease 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.