Customer benefits

Resists degradation
The good oxidation stability provided by the multi-component inhibitor system resists oil breakdown during exposure to high temperature conditions.

Potential maintenance and downtime savings
The highly refined base stocks and multi-component oxidation inhibitor system resist the formation of harmful sludge and varnish deposits. The rust inhibitor protects components against corrosion.

Smooth operation
The good water separability of the highly refined base stocks and inhibitor system ensure rapid settling of harmful water accumulated from steam condensate. The non-silicone foam inhibitor allows rapid release of entrained air while minimizing foam formation, enabling reliable operation of sensitive hydraulic control devices.

Potential inventory savings
The rust and oxidation inhibited formulation has multipurpose capability in a wide range of industrial applications for which this type of product is recommended, helping to simplify oil inventories and reduce the possibility of using the wrong lubricant.

Applications
Regal R&O is suitable for use in the following applications provided a rust and oxidation (R&O) inhibited oil is acceptable.

- Steam and hydraulic turbines operating under all service conditions
- Centrifugal, rotary and reciprocating compressors, turbo-blowers and centrifugal pumps (not recommended for use in breathing air compressors)
- Bath and circulating systems supplying rolling element bearings of all types, lightly loaded gear sets, vacuum pumps (including rotary vacuum pumps used in the dairy farming industry), machine tools (including computer controlled units), conveyors, electric motors, and low to moderate pressure hydraulic pumps where anti-wear properties are not required

Product features:
- Regal® R&O is an inhibited circulating and turbine oil formulated from highly refined base stocks and rust, oxidation and foam inhibitors.
## Typical key properties

<table>
<thead>
<tr>
<th></th>
<th>32</th>
<th>46</th>
<th>68</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISO Grade</strong></td>
<td>32</td>
<td>46</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td><strong>Product Code</strong></td>
<td>520010</td>
<td>520011</td>
<td>520012</td>
<td>520013</td>
</tr>
<tr>
<td><strong>Air Release @ 50°C, mins</strong></td>
<td>2.9</td>
<td>3.8</td>
<td>5.0</td>
<td>–</td>
</tr>
<tr>
<td><strong>Flash Point, COC, °C</strong></td>
<td>212</td>
<td>224</td>
<td>234</td>
<td>254</td>
</tr>
<tr>
<td><strong>Oxidation Stability, D943, hrs to 2.0 Acid No.</strong></td>
<td>3000</td>
<td>3000</td>
<td>2700</td>
<td>2500</td>
</tr>
<tr>
<td><strong>Pour Point, °C</strong></td>
<td>-9</td>
<td>-9</td>
<td>-9</td>
<td>-9</td>
</tr>
<tr>
<td><strong>Viscosity, mm²/s @ 40°C</strong></td>
<td>32</td>
<td>46</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td><strong>mm²/s @ 100°C</strong></td>
<td>5.4</td>
<td>6.7</td>
<td>8.6</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Viscosity Index</strong></td>
<td>102</td>
<td>100</td>
<td>98</td>
<td>96</td>
</tr>
</tbody>
</table>

Minor variations in product typical test data are to be expected in normal manufacturing.
Performance standards

Regal R&O is suitable for use where the following industry and OEM specifications are requested:

- German Standard DIN 51515 Part 1 (2001)
- General Electric GEK 27070, GEK 46506D
- ANSI/AGMA 9005-F16 for R&O inhibited oils
- David Brown Table M - 0M, 1M, 2M, 3M (ISO 32 to 100, respectively)
- Cincinnati Fives P-38, P-55, P-54 (ISO 32, 46, 68, respectively)

Regal R&O 68 is suitable for use in Masport rotary vacuum pumps used in dairy farm milking machine applications. In extreme cold weather conditions, Regal R&O 46 may be required.

For turbines, where full equipment manufacturer approvals are required, please use GST and GST Advantage turbine oils.

For more information, go to www.caltex.com