Customer benefits

Extended service life compared to mineral oils
Excellent oxidation and thermal stability of the synthetic polyol ester base fluid and additive system resists oil breakdown under severe, high temperature conditions. The low volatility of the synthetic polyol ester minimizes evaporative losses.

Minimum deposit formation
Reduced coking tendency of the synthetic polyol ester base fluid and additive system minimizes deposit formation on bearings and other areas exposed to the heat of the hot gases.

Good wide temperature range performance
Viscosity-temperature characteristics of the synthetic polyol ester provide outstanding low temperature fluidity to facilitate starting at low temperatures, while ensuring that an effective lubricant film is available under the most severe, high temperature conditions to protect critical components against wear.

Applications

Regal® SGT 22 is recommended for aeroderivative gas turbines exposed to severe operating environments in non-aviation applications such as industrial power generation, gas transmission and marine propulsion.

Product features:

• Regal® SGT 22 is a premium performance, synthetic polyol ester based turbine lubricant for use in aeroderivative gas turbines in stationary and marine service.

• Regal® SGT 22 contains additives to protect against oxidation, corrosion and wear, providing excellent high temperature thermal and oxidation stability.
Typical properties

REGAL® SGT 22

<table>
<thead>
<tr>
<th>KEY PROPERTIES</th>
<th>ASTM</th>
<th>520008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>D664</td>
<td>0.16</td>
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<tr>
<td>Acid No., mg KOH/g</td>
<td>D92</td>
<td>270</td>
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<tr>
<td>Flash Point, COC, °C</td>
<td>D97</td>
<td>-57</td>
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<tr>
<td>Pour Point, °C</td>
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<tr>
<td>Viscosity, Kinematic</td>
<td>D445</td>
<td>9468</td>
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<tr>
<td>mm²/s @ -40°C</td>
<td>D445</td>
<td>25.6</td>
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<tr>
<td>mm²/s @ 40°C</td>
<td>D445</td>
<td>5.12</td>
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<tr>
<td>mm²/s @ 100°C</td>
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</table>

Performance standards

- Approved against U.S. Military Specification MIL-PRF-23699F STD
- Holds formal approvals for use in the following gas turbines:
  - Rolls-Royce RB 211
  - Rolls-Royce Industrial Avon
  - Rolls-Royce (Allison) Industrial 501-K
  - GE Energy Industrial Aeroderivative units

Not to be used in aircraft service

Not to be used in Solar Turbines requiring oils meeting Solar Specification ES 9-224 W – Class III OR MIL-PRF-23699F C/I specification.
Regal® SGT 22

Service considerations

Synthetic polyol ester lubricants slowly hydrolyze in the presence of water. High temperatures accelerate this process. Accordingly, Regal SGT 22 should be stored indoors.

Regal SGT 22 is compatible and miscible with all other MIL-PRF-23699F STD approved oils. For this reason, changeover to Regal SGT 22 can be achieved by topping off. However, by virtue of differences in seal swell characteristics between oils, the engine / accessory manufacturers’ approval should be obtained for any proposed oil change. Mixing of different viscosity grades is not recommended.

Regal SGT 22 is not compatible with mineral oils and should not be mixed with phosphate ester hydraulic fluids since such mixtures can adversely affect seal compatibility and coking propensity.

Regal SGT 22 is expected to be compatible with metals normally used in aeroderivative gas turbines and accessory equipment, and the majority of modern paints. Advice should be sought from the equipment manufacturer to confirm the compatibility of polyol ester fluids with the metals and paints used in their equipment.

The following seal materials are compatible with Regal SGT 22: Viton®, nitrile and silicone rubbers, PTFE and nylon.