Shell Clavus G
Refrigerator Compressor Lubricant

Shell Clavus G is high quality, hydrotreated napthenic mineral oil without additives. Specific selection of the base oil and advanced refining techniques give a range of oils specially suited for the efficient lubrication of refrigeration compressors.

Properties
Shell Clavus G are high quality, naphthenic mineral oils without additives. The specific selection of base oils and advanced refining techniques ensure excellent chemical stability in contact with refrigerants, very good thermal stability, good lubricating properties and good low temperature fluidity. There is a range of four viscosity grades which means that most operating conditions are covered.

Application
Shell Clavus G is designed for the lubrication of compressors with halogenated hydrocarbons as refrigerant (R12, R22). It is also suitable for use with ammonia (R717) or hydrocarbons (R600) as refrigerant. For all refrigeration and air-conditioning appliances: domestic, commercial and industrial systems with high, moderate or low evaporation temperatures.

Health and Safety
Shell Clavus G is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

For further guidance on Product Health and Safety refer to the appropriate Shell Product Safety Data Sheet.

Protect the environment
Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Advice
Advice on applications not covered in this leaflet may be obtained from your Shell Representative.
**Typical Data**

Shell Clavus G meets the requirements of DIN 51503 KC, and also KAA, KE.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Viscosity grade</strong></td>
<td>ISO 3448</td>
</tr>
<tr>
<td><strong>Refrigerator oil-group</strong></td>
<td>DIN 51503</td>
</tr>
<tr>
<td><strong>Kinematic viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>at 40°C</td>
<td>30</td>
</tr>
<tr>
<td>at 100°C</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Density at 15°C</strong></td>
<td>883</td>
</tr>
<tr>
<td><strong>Flash point (COC)</strong></td>
<td>195</td>
</tr>
<tr>
<td><strong>Pour point</strong></td>
<td>-48</td>
</tr>
<tr>
<td><strong>Fluidity in U-tube</strong></td>
<td>-35</td>
</tr>
<tr>
<td><strong>Floc point R 12</strong></td>
<td>-50</td>
</tr>
<tr>
<td><strong>Neutralisation number</strong></td>
<td></td>
</tr>
<tr>
<td>water-soluble acids</td>
<td>neutral</td>
</tr>
<tr>
<td><strong>Saponification number</strong></td>
<td>&lt;0.1</td>
</tr>
<tr>
<td><strong>Insoluble in R 12 at -30°C</strong></td>
<td>&lt;0.02</td>
</tr>
<tr>
<td><strong>Stability with refrigerants</strong></td>
<td></td>
</tr>
<tr>
<td>R 12</td>
<td>&gt;96</td>
</tr>
<tr>
<td>R 22</td>
<td>&gt;96</td>
</tr>
</tbody>
</table>

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variation in these characteristics may occur.