Introduction

Apiezon AP101 is an excellent general purpose, hydrocarbon grease, which is intended for a variety of industrial and scientific applications.

The key features of AP101 are shown in the table opposite.

The secret to anti-seize

Apiezon AP101 contains PTFE, which confers superior anti-seize properties providing long-lasting lubrication and ensuring smooth operation of stopcocks and taps. Coupled with easy separation of ground or polished glass joints AP101 is an excellent general purpose grease for laboratory use.

The value of Apiezon AP101 anti-seize properties are not limited to laboratory or glassware use, but are equally effective when used on metal equipment which may be subject to seizure or corrosion.

A small amount of Apiezon AP101 on fastenings which, when exposed to corrosive environments normally jam solid, will be protected thus allowing them to be effortlessly removed.

Non silicone

Being hydrocarbon based AP101 does not suffer from the problems of "creep" or "carry over" which is traditionally associated with silicone greases. It reduces sample contamination and consequently the risk of interference in analytical techniques such as infra-red and mass spectrometry. Additionally AP101 can be used with confidence in paint spraying and metal deposition processes.

Solvent resistant

Both the lithium stearate gel base and PTFE in AP101 are insoluble in most solvents. They ensure that AP101 shows resistance to water, alcohols, ketones and esters.

In addition AP101 resists attack from aqueous acid and alkali solutions, alcoholic alkali solutions and corrosive gases.

Wide temperature range

AP101 is an excellent general purpose grease for sealing joints and is ideal for use in critical lubrication conditions such as highly stressed bearings. It can be used over a very wide range of temperatures, possessing its optimum consistency over the -15 to +150°C temperature range, but is useable down to -40°C and, for limited periods, up to +180°C.

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical working temperature range, °C</td>
<td>-40 to 180</td>
</tr>
<tr>
<td>Dripping point - ASTM.D 566-02, °C</td>
<td>&gt;200</td>
</tr>
<tr>
<td>Vapour pressure @ 20°C / 68°F, Torr</td>
<td>&lt;10⁻⁵</td>
</tr>
<tr>
<td>Relative density @ 20°C / 68°F, Torr</td>
<td>0.981</td>
</tr>
<tr>
<td>Coefficient of expansion per °C over 20°C – 30°C</td>
<td>0.00066</td>
</tr>
<tr>
<td>Lubricity 4 Ball Test – ASTM.D 2596-97(2002)e1, kg</td>
<td>450</td>
</tr>
</tbody>
</table>
Under Vacuum

Apiezon AP101 exhibits good vacuum properties in the lower to medium vacuum range. Within the scope of its optimum working temperatures AP101 can be used under vacuum conditions down to $10^{-6}$ torr.

For full information on the vapour pressure of AP101 refer to the vapour pressure curve opposite.

Easily removed

Apiezon AP101 is easily removed by wiping with a soft clean cloth. Any residues of grease can be washed away with an aqueous glassware detergent.

AP101 works when you want it to, but is easily removed when you don’t.

Industry approvals

AP101 is highly regarded within industry and has gained prestigious approvals from Marconi Radar and NATO.