For optimum GC performance, it is necessary to maintain a leak free seal between the inlet liner and the injection port body. For best results, Supelco recommends Therm-O-Ring™ seals.

Supelco’s Therm-O-Ring seals are superior high temperature replacements for Viton® or silicone O-rings used with Hewlett Packard, Perkin-Elmer Auto System or other GC’s utilizing ¼” O-rings (not ferrules) to install inlet liners. One size fits 6.3mm OD and 6.5mm OD Hewlett Packard inlet liners and ¼” OD Perkin-Elmer inlet liners.

Unlike Silicon or Viton O-rings, Therm-O-Ring seals remove easily without sticking to the GC inlet or glass liner, will not leak nor introduce background noise. Because they do not change chemical composition like other O-rings, Therm-O-Ring seals never fragment when removed.

The superior characteristics of Therm-O-Ring seals result from a blend of high temperature elastomer and fluoro polymer. This proprietary composition exhibits excellent high temperature compression set characteristics and low gas permeability. Therm-O-Ring seals are perfectly suited for GC applications and will work at inlet temperatures up to 375°C. Table 1 illustrates temperature limits for Therm-O-Ring seals and other O-ring compositions.

Therm-O-Ring seals are exclusive to Supelco and are another example of a high performance chromatography product developed at Supelco by chromatographers for chromatographers.

<table>
<thead>
<tr>
<th>Table 1. Temperature Limit Comparison of Common O-Ring Materials as listed by the Manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
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<tr>
<td>------------</td>
</tr>
<tr>
<td>Graphite</td>
</tr>
<tr>
<td>Therm-O-Ring seals</td>
</tr>
<tr>
<td>Silicone</td>
</tr>
<tr>
<td>Viton</td>
</tr>
</tbody>
</table>

Physical Characteristics

- Material: Proprietary blend of high temperature elastomer and fluoro polymer
- Color: Green
- Temperature Range: -25°C to 375°C
- Size: ID .239” Cross section OD .070” (Manufactured to AS-568A* standard)
- Applications: Hewlett Packard Models 4890, 5880, 5890, 6890, 6850 Perkin Elmer Auto System, 9000 series with split/splitless injection port Finnigan Models 9001, GCQ. Other GC’s using ¼” O-ring (not ferrules) seals

Ordering Information:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therm-O-Ring Seals, Pk. of 10</td>
<td>21003-U</td>
</tr>
<tr>
<td>Therm-O-Ring Seals, Pk. of 25</td>
<td>21004-U</td>
</tr>
</tbody>
</table>

*AS-568A: Aerospace Standard Uniform Dash Numbering System for O-rings. All military standard (MS) drawings currently use this system.

Trademarks

Therm-O-Ring – Sigma-Aldrich Co.
Viton – E.I. duPont de Nemours & Co., Inc.
For more information, or current prices, contact your nearest Supelco subsidiary listed below. To obtain further contact information, visit our website (www.sigma-aldrich.com), see the Supelco catalog, or contact Supelco, Bellefonte, PA 16823-0048 USA.

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