Benefits

- Only REMP® thermo seal is stored in a temperature controlled warehouse; this ensures an extended sealing life over regular sealing foil
- REMP foil is color coded to ensure that the correct product is used for each application
- Samples held in plates and tubes sealed with REMP sealing foil have been stored for over 10 years
- REMP can provide a complete solution for tube and plate sealing and piercing

Principle of Heat Sealing

The sealing material is first placed in position over the plate. Heat is applied evenly for several seconds, resulting in welding of the sealing material and the plate. This achieves a complete seal without the need for adhesives, which can interfere with the sample.

Advantages

Heat sealing is a proven technology that offers a number of advantages over other plate sealing methods:

- 100% sealing integrity
- Ideal for PCR and storage applications
- Exceptional seal integrity at low temperatures
- No adhesives which could interfere with the sample
- Greater resistance to solvents such as DMSO
- Peelable and pierceable seals
- Quicker and more cost-effective than other sealing methods

Sample Temperature

Due to the rapid nature of heat sealing, the temperature of samples within the wells does not rise significantly during sealing. Therefore, even temperature sensitive samples, such as enzymatic reactions, are not affected during the sealing step.

REMP Thermo-Seal™

REMP has developed a range of Thermo-Seal materials for different applications. The Thermo-Seal range is:

- Pierceable Thermo-Seal: aluminum foil, silver
- Removable Thermo-Seal: aluminum foil, blue
- Extra-Durable Removable Thermo-Seal: aluminum foil, red
- Removable Thermo-Seal for PS-Plates: aluminum foil, dark grey
- Clear Thermo-Seal: dual layered laminate, transparent

Analytical testing by GC-MS after DMSO extraction confirmed no detectable leachables.

For further information regarding the REMP Thermo-Seal or the REMP Heat Sealers, please don’t hesitate to contact us.
<table>
<thead>
<tr>
<th>Description</th>
<th>25µm aluminum foil</th>
<th>25µm aluminum foil</th>
<th>38µm aluminum foil</th>
<th>38µm aluminum foil</th>
<th>dual layered laminate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>silver</td>
<td>blue</td>
<td>red</td>
<td>dark grey</td>
<td>transparent</td>
</tr>
<tr>
<td>Content of plate exposed to</td>
<td>PP</td>
<td>PE</td>
<td>PE</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Recommended plate material</td>
<td>PP</td>
<td>PP</td>
<td>PP, PS</td>
<td>PP, PS</td>
<td>–</td>
</tr>
<tr>
<td>Typical sealing conditions</td>
<td>2.5 – 3.5 seconds 165°C – 178°C</td>
<td>2.5 – 3.5 seconds 160°C – 170°C</td>
<td>2.5 – 3.5 seconds 160°C – 170°C</td>
<td>2.0 – 3.5 seconds 162°C – 174°C</td>
<td>2.0 – 3.5 seconds 160°C – 165°C</td>
</tr>
<tr>
<td>Characteristics</td>
<td>very good solvent resistant</td>
<td>very good solvent resistant*</td>
<td>very high tensile strength</td>
<td>some solvent resistant 1 – 5% DMSO at +4°C or lower for up to a few weeks**</td>
<td>some solvent resistant 1 – 2% DMSO resistant for up to a few weeks**</td>
</tr>
<tr>
<td>Remarks (based on user feedback)</td>
<td>not resealable, use for long term storage</td>
<td>3 – 5 times resealable*, use for mid term storage</td>
<td>3 – 5 times resealable*, use for long term storage</td>
<td>3 – 5 times resealable*</td>
<td>up to 8 times resealable*, use for short term storage up to three month</td>
</tr>
</tbody>
</table>

** depending on plate type and sealing parameters
** DMSO concentration and storage temperature are serious issues. Prior testing to assess the suitability of the Thermo-Seal is recommended, contact Brooks for more information

**Pack size:**
- Pierceable Thermo-Seal:  5'000 seals/roll  100 sheets p. p.
- Removable Thermo-Seal:  5'000 seals/roll  100 sheets p. p.
- Extra-Durable Removable Thermo-Seal:  5'000 seals/roll  100 sheets p. p.
- Removable Thermo-Seal for PS-Plates:  5'000 seals/roll  100 sheets p. p.
- Clear Thermo-Seal:  5'000 seals/roll  100 sheets p. p.