High-performance heat shrink options extruded for protection and customized to overcome complex design challenges.
Limit costly insulation failures.

**Heat Shrink Products**

**FluoroPEELZ® Peelable Heat Shrink**: This optically clear, peelable heat shrink is designed to improve the reflow of the catheter jacket - the final step in the construction process. FluoroPEELZ® reduces downstream processing, increases yields, and produces minimal scrap for cost savings. FluoroPEELZ® is available in sizes from neurological builds to AAA profiles.

**Dual-Shrink™**: Can be used to splice wiring exposed to the most extreme environments. Constructed with an exterior of PTFE heat shrink and an inner layer of FEP, our Dual-Shrink™ provides a tight moisture-proof bond over wires, cables, connectors, splices, terminals and others.

**PTFE Sub-Lite-Wall®**: 4:1 & 2:1 Heat Shrink: We make the smallest heat shrink in the world - as thin as a human hair - with our PTFE-Sub-Lite-Wall® products. These products have wall thicknesses down to .0015” and tolerances of +/- .0005”. Zeus also has PTFE Heat Shrink catalog sizes ranging to 4.00” expanded ID’s with a maximum shrink ratio of 4:1 and meets the AS23053/11. These excellent insulators withstand high temperatures up to (500 °F / 260 °C).

**PEEKshrink™**: This product is ideal for difficult environments where abrasion, chemicals, or dielectric interference pose a threat to wires and electrical components.

---

**Heat Shrink Property Comparison Chart**

<table>
<thead>
<tr>
<th>RESIN/PRODUCT</th>
<th>OPERATING TEMP</th>
<th>SHRINK RATIOS</th>
<th>RECOVERY TEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FluoroPEELZ®</td>
<td>200 °C / 400 °F</td>
<td>Up to 1.6:1</td>
<td>215 °C / 420 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PEEKshrink™</td>
<td>260 °C / 500 °F</td>
<td>Up to 1.4:1</td>
<td>343 °C - 385 °C (650 °F - 725 °F)</td>
</tr>
<tr>
<td>Dual-Shrink™</td>
<td>232 °C / 450 °F</td>
<td>Varies by diameter</td>
<td>343 °C / 650 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>Low-Temp Dual-Shrink™</td>
<td>302 °F / 150 °C</td>
<td></td>
<td>215 °C / 419 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PTFE Sub-Lite-Wall®</td>
<td>260 °C / 500 °F</td>
<td>Up to 4:1</td>
<td>343 °C / 650 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PTFE</td>
<td>260 °C / 500 °F</td>
<td>Up to 4:1</td>
<td>343 °C / 650 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP</td>
<td>205 °C / 400 °F</td>
<td>Up to 2:1</td>
<td>215 °C / 420 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP Roll Cover</td>
<td>205 °C / 400 °F</td>
<td>Up to 1.6:1</td>
<td>215 °C / 420 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP Lay-Flat™</td>
<td>205 °C / 400 °F</td>
<td>Up to 1.6:1</td>
<td>215 °C / 420 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>ETFE</td>
<td>150 °C / 302 °F</td>
<td>Up to 1.6:1</td>
<td>174 °C / 345 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PFA</td>
<td>260 °C / 500 °F</td>
<td>Up to 1.6:1</td>
<td>210 °C / 410 °F +/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PET Lay-Flat™</td>
<td>145 °C / 293 °F</td>
<td>Varies</td>
<td>89 °C / 180 °F</td>
</tr>
</tbody>
</table>

*Always assure good ventilation in the immediate work area prior to beginning the heat shrink process. Caution: Fumes may cause nausea and dizziness. Heat guns can also be used to recover heat shrink material.
### Heat Shrink Property Comparison Chart

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TEMP</th>
<th>SHRINK RATIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET Lay-Flat™</td>
<td>Varies by diameter</td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PFA</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>ETFE</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP Lay-Flat™</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP Roll Cover</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>FEP</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>Sub-Lite-Wall®</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PTFE</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>Shrink™</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>Low-Temp Dual-Shrink™</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
<tr>
<td>PEEKshrink™</td>
<td></td>
<td>+/- 10 °C / 50 °F</td>
</tr>
</tbody>
</table>

**APPLICATIONS**

- **343 °C - 385 °C**: 2000 V/Mil
- **200 °C**: 2000 V/Mil
- **145 °C / 293 °F**: 1800 V/Mil
- **200 °C / 400 °F**: 2000 V/Mil
- **260 °C / 500 °F**: N/A
- **215 °C / 419 °F**: 2000 V/Mil
- **260 °C / 500 °F**: 800 V/Mil
- **215 °C / 420 °F**: 343 °C / 650 °F
- **89 °C / 180 °F**: Up to 2:1
- **260 °C / 500 °F**: Up to 1.4:1
- **215 °C / 420 °F**: Up to 4:1
- **3500 V/Mil**: 302 °F / 150 °C
- **205 °C / 400 °F**: Up to 1.6:1
- **215 °C / 420 °F**: 260 °C / 500 °F
- **343 °C / 650 °F**: 2000 V/Mil
- **Up to 4:1**: 3500 V/Mil
- **210 °C / 410 °F**: 2000 V/Mil

**DIELECTRIC STRENGTH ASMT D149**

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>SPECIAL FEATURES</th>
</tr>
</thead>
</table>
| 2000 V/Mil | - Peelable  
- Clear  
- USP Class VI |
| 2000 V/Mil | - High temperature resistance  
- Abrasion resistant  
- Lightweight  
- Non-flammable |
| 800 V/Mil  | - Thinnest recovered wall, globally  
- Smallest PTFE diameters  
- High temp resistance  
- Chemically resistant  
- Highly lubricious  
- UV resistant |
| 800 V/Mil  | - High temperature resistance  
- Chemically resistant  
- Lubricious  
- UV resistant  
- AS23053/12 |
| 2000 V/Mil | - High temperature resistance  
- Chemically resistant  
- Lubricious  
- UV resistant  
- Long lengths  
- Non-flammable  
- AMS 23053/11 (Excluding 2:1) |
| 2000 V/Mil | - High temperature resistance  
- Chemically resistant  
- Lubricious  
- UV resistant  
- Long lengths  
- Larger diameters  
- AS23053/11 |
| 2000 V/Mil | - High temperature resistance  
- Thin walls combined with large diameters  
- Long lengths |
| 1800 V/Mil | - Abrasion resistant  
- Chemical resistant  
- Non-flammable |
| 2000 V/Mil | - Temperature resistant  
- More flexible than PTFE  
- Melt processable |
| N/A       | - Low recovery temperature  
- Quick recovery  
- Long lengths  
- Easy shipping  
- Cost effective |

**APPLICATIONS**

- Catheter manufacturing aid  
- Packaging  
- Environmental seal over wires, cables, connectors, splices, terminals and other components  
- Sensor encapsulation  
- Fiber Optic splice encapsulation and boot strain relief  
- Wire splicing/termination  
- Insulation  
- Protective Cover  
- High temperature shrink  
- Thicker wall for durable covering of rollers  
- Seamless composite release aid  
- Abrasion resistant wire insulation  
- High temperature insulation  
- Available in long lengths  
- Light bulb encapsulation

---

*Ovens are the most reliable way to recover heat shrink products due to their ability to ensure even heating and reduce the risk of overheating the material (which can lead to brittleness and cracking).*
For over 50 years, Zeus has been working to achieve excellence as a global supplier of quality extrusions by: putting customers at the heart of everything we do, inspiring compassion toward one another, and relentlessly pursuing perfection. We’ve dedicated ourselves to building partnerships, products, and services for the benefit of our customers.

Headquartered in Orangeburg, South Carolina, Zeus employs 1,700+ team members and operates 10+ facilities around the world.