The fabric burn test is best done outside or in a well-ventilated room; the smell of synthetic burning fabric can be unpleasant, hazardous and linger. Note that the test is not 100% accurate due to fabrics that are blends. These fabrics will give a result that is a combination of both fibers. Also, some fabrics may have chemicals added which also increases the unreliability of the burn test.

**Tools**
- Fireproof dish (e.g., ceramic, glass, metal tin)
- Tweezers
- Matches
- Water in case you need to put out the fire

**Method**
- Cut a small piece of fabric (1 inch square)
- Hold one side with tweezers over fireproof dish
- Light the other end with match
- Let the piece burn completely, dropping the fabric when necessary
- Take note of the smell and the smoke as it burns, BUT do not put the burning fabric directly under your nose
- Leave the residue cool at the bottom of the dish so that you can handle when cool

<table>
<thead>
<tr>
<th>Description</th>
<th>Flame &amp; Residue</th>
<th>Smell</th>
<th>Smoke</th>
<th>Ash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>natural cellulose fiber</td>
<td>burns quickly</td>
<td>may flare</td>
<td>no beads remain</td>
</tr>
<tr>
<td>Hemp</td>
<td>natural cellulose fiber</td>
<td>burns quickly</td>
<td>bright flame</td>
<td>no beads remain</td>
</tr>
<tr>
<td>Linen (Flax)</td>
<td>man-made cellulose fiber</td>
<td>burns slowly</td>
<td>does not melt</td>
<td>no beads remain</td>
</tr>
<tr>
<td>Rayon</td>
<td>natural protein fiber</td>
<td>burns slowly</td>
<td>fabric cuts away from flame</td>
<td>no beads remain</td>
</tr>
<tr>
<td>Silk</td>
<td>natural protein fiber</td>
<td>burns slowly</td>
<td>fabric cuts away from flame</td>
<td>leaves a dark, crushable bead</td>
</tr>
<tr>
<td>Wool</td>
<td>natural protein fiber</td>
<td>burns slowly</td>
<td>fabric cuts away from flame</td>
<td>leaves a dark, crushable bead</td>
</tr>
<tr>
<td>Acetate &amp; Triacetate</td>
<td>manufactured protein fiber</td>
<td>flares quickly</td>
<td>melts and drips</td>
<td>leaves a hard bead that cannot be crushed</td>
</tr>
<tr>
<td>Nylon &amp; Polymide</td>
<td>synthetic fiber</td>
<td>shinks away from flame</td>
<td>melts and drips</td>
<td>leaves a hard, brown bead that cannot be crushed</td>
</tr>
<tr>
<td>Polyester</td>
<td>synthetic polymer fiber</td>
<td>burns and melts</td>
<td>leaves a hard, brown bead that cannot be crushed</td>
<td>chemical odour</td>
</tr>
<tr>
<td>Acrylic</td>
<td>synthetic fiber</td>
<td>flares up, burns quickly</td>
<td>shrinks away from flame</td>
<td>leaves hard, irregular beads</td>
</tr>
</tbody>
</table>