**General loading procedure for E-gels**

*(Instructions written for 1 student group, loading 4 DNA samples and a marker. Please adjust as needed depending on actual samples being loaded.)*

**Procedure 1: Prepare gel**

1. Plug PowerBase™ into an electrical outlet.
2. Remove gel cassette from package.
3. Insert the gel (with comb in place) into the base right edge first. The Invitrogen logo should be located at the bottom of the base. Press firmly at the top and bottom to seat the gel cassette in the PowerBase™. A steady, red light will illuminate if the gel cassette is correctly inserted.

**Procedure 2: Load prepared samples**

(If two groups are sharing a gel, Group A will load DNA samples in wells 1-4; Group B will load DNA samples in wells 7-10.)

<table>
<thead>
<tr>
<th>Well #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>What to add to the well</td>
<td>20μl water</td>
<td>20μl water</td>
<td>20μl water</td>
<td>10μl water + marker</td>
<td>10μl water + 8μl DNA</td>
<td>10μl water + 8μl DNA</td>
<td>10μl water + 8μl DNA</td>
<td>20μl water</td>
<td>20μl water</td>
<td>20μl water</td>
<td>20μl water</td>
<td></td>
</tr>
</tbody>
</table>

1. Remove and discard comb from the E-Gel® cassette.
2. Add 10μl sterile distilled H₂O to wells 4-8.
3. Add 20μl sterile distilled H₂O to wells 1-3, 9-12.
4. Add 8μl DNA samples to wells 5-8.
5. Add 8μl marker to well 4.

**Procedure 3: Run gel**

1. Press and release the 30 minute button on the E-Gel® PowerBase™ to begin electrophoresis.
2. At the end of the run, the current will automatically shut off and the power base will display a flashing red light and beep rapidly. Press either button to stop the beeping, and unplug the E-Gel® PowerBase™.
3. Remove the gel cassette and analyze your results by viewing on one of the transilluminators.