Pharmacy

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Route</th>
<th>Formulation</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorothiazide</td>
<td>Oral</td>
<td>Suspension</td>
<td>50mg/ml</td>
</tr>
</tbody>
</table>

**Formula Qty:** 100mL  
**Shelf Life:** 30 days

**Equipment needed:**
Mortar/pestle, graduated cylinder, stirring rod

**Auxiliary labeling/Storage:** Refrigerate, Shake Well

**Directions:**
1. Crush tablets in mortar and pestle and triturate to a fine powder.
2. Levigate with glycerin to form a uniform paste.
3. Add about half of the final volume of methylcellulose gel in geometric proportions and mix well after each addition.
4. Dissolve citric acid powder in distilled water.
5. Add citric acid solution and parabens solution to mortar. Mix well.
6. Transfer to graduate. Rinse mortar with methylcellulose gel & add to graduate. Stir well.
7. QS to final volume with methylcellulose gel. Stir well.

**Notes:**
- Parabens solution can be made by mixing 4 grams methylparabens and 1 gram propylparabens with propylene glycol QS to 100mL. Use 2mL of this solution in every 100mL chlorothiazide to give parabens 0.1%.
- If parabens not added, shelf life is 7 days refrigerated.
- Methylcellulose 1% gel is commercially available.

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>QS</th>
<th>Quantity</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorothiazide 250mg</td>
<td></td>
<td>20</td>
<td>Tablet</td>
</tr>
<tr>
<td>Glycerin</td>
<td></td>
<td>10</td>
<td>mL</td>
</tr>
<tr>
<td>Distilled water</td>
<td></td>
<td>10</td>
<td>mL</td>
</tr>
<tr>
<td>Citric acid powder, USP</td>
<td></td>
<td>0.5</td>
<td>Gram</td>
</tr>
<tr>
<td>Parabens solution</td>
<td></td>
<td>2</td>
<td>mL</td>
</tr>
<tr>
<td>Methylcellulose 1% gel</td>
<td>X</td>
<td>100</td>
<td>mL</td>
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</table>

**Citations/References:**
Reviewed: 6/30/2015 LM

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Pharmacy

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