Preparation of 5% acetic acid, Lugol’s iodine solution, and Monsel’s paste

5% dilute acetic acid

**Ingredients**
- Glacial acetic acid
- Distilled water

**Quantity**
- 5 mL
- 95 mL

**Preparation**
Carefully add 5 mL of glacial acetic acid into 95 mL of distilled water and mix thoroughly.

**Storage**
Unused acetic acid should be discarded at the end of the day.

**Label**
5% dilute acetic acid

**Note:** It is important to remember to dilute the glacial acetic acid, because the undiluted strength causes a severe chemical burn if applied to the epithelium.

Lugol’s iodine solution

**Ingredients**
- Potassium iodide
- Distilled water
- Iodine crystals

**Quantity**
- 10 g
- 100 mL
- 5 g

**Preparation**
A. Dissolve 10 g of potassium iodide in 100 mL of distilled water.
B. Slowly add 5 g of iodine crystals, while shaking.
C. Filter and store in a tightly stoppered brown bottle.

**Storage**
1 month

**Label**
Lugol’s iodine solution
Use by (date)
Monsel's paste

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferric sulfate base</td>
<td>15 g</td>
</tr>
<tr>
<td>Ferrous sulfate powder</td>
<td>a few grains</td>
</tr>
<tr>
<td>Sterile water for mixing</td>
<td>10 mL</td>
</tr>
<tr>
<td>Glycerol starch</td>
<td>12 g</td>
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</table>

**Preparation**

*Take care: The reaction is exothermic (emits heat).*

A. Add a few grains of ferrous sulfate powder to 10 mL of sterile water in a glass beaker. Shake.
B. Dissolve the ferric sulfate base in the solution by stirring with a glass stick. The solution should become crystal clear.
C. Weigh the glycerol starch in a glass mortar. Mix well.
D. Slowly add ferric sulfate solution to glycerol starch, constantly mixing to get a homogeneous mixture.
E. Place in a 25 mL brown glass bottle.
F. For clinical use, most clinics prefer to allow enough evaporation to give the solution a sticky, paste-like consistency that looks like mustard. This may take 2–3 weeks, depending on the environment. The top of the container can then be secured for storage. If necessary, sterile water can be added to the paste to thin it.

*Note: This preparation contains 15% elemental iron.*

**Storage**

6 months

**Label**

Monsel's paste
Shake well
External use only
Use by (date)