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

#### 5% dilute acetic acid

IngredientsQuantity1. Glacial acetic acid5 mL2. Distilled water95 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	Quantity
1. Potassium iodide	10 g
2. Distilled water	100 mL
3. lodine crystals	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

# IngredientsQuantity1. Ferric sulfate base15 g

2. Ferrous sulfate powder3. Sterile water for mixing4. Glycerol starcha few grains10 mL12 g

### 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)