

Aim: Preparation of Iodine Throat Paint (Mandl's Paint)

References

1. Indian Pharmacopoeia - Monograph on Mandl's Paint.
2. Martindale: The Complete Drug Reference - Section on Topical Antiseptics.
3. Research articles on "Iodine-Based Antiseptics" from PubMed.

Objective: To prepare 100 mL of Iodine Throat Paint (Mandl's Paint) as per standard pharmaceutical formulations for use as a topical antiseptic for throat infections.

Materials Required

Chemicals:

- Iodine: 1.25 g
- Potassium Iodide: 2.50 g
- Glycerin: 25 mL
- Distilled Water: q.s. to 100 mL

Equipment:

- Analytical balance
- Beakers (100 mL, 250 mL)
- Measuring cylinder (10 mL, 100 mL)
- Stirring rod
- Funnel
- Amber-colored glass bottle
- Dropper

Principle

Mandl's Paint is a throat antiseptic preparation where iodine serves as the active ingredient. Potassium iodide enhances the solubility of iodine in water. Glycerin is used as a vehicle to provide viscosity, ensure uniform application, and protect the throat mucosa.

Procedure

1. Dissolution of Potassium Iodide:

- Weigh 2.50 g of potassium iodide and transfer it into a 100 mL beaker.
- Add 10 mL of distilled water and stir until the potassium iodide dissolves completely.

2. Addition of Iodine:

- Weigh 1.25 g of iodine and gradually add it to the potassium iodide solution with constant stirring.
- Continue stirring until the iodine dissolves completely. A clear reddish-brown solution is formed.

3. Addition of Glycerin:

- Measure 25 mL of glycerin using a measuring cylinder and add it to the iodine solution.
- Stir thoroughly to ensure uniform mixing.

4. Final Volume Adjustment:

- Add distilled water q.s. to make the total volume up to 100 mL. Mix well.

5. Packaging:

- Transfer the prepared solution into an amber-colored bottle to protect it from light.
- Ensure the bottle is airtight and attach a dropper cap.

Label

- **Product Name:** Iodine Throat Paint (Mandl's Paint)
- **Usage:** Apply a small amount to the throat using a cotton swab or applicator as directed by a physician.
- **Storage:** Store in a cool, dark place. Keep away from direct sunlight.
- **Precautions:** For external use only. Avoid ingestion.

Precautions

1. Handle iodine with care as it can stain skin and surfaces.
2. Use accurate weighing techniques to ensure proper concentration.

3. Maintain sterile conditions during preparation to avoid contamination.
4. Keep the preparation in an amber-colored bottle to prevent iodine degradation due to light exposure.

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