



Minoxidil - Usage Documents

Fact Sheet

CAS NO: 38304-91-5

APPEARANCE: White crystalline powder

SOLUBILITY: Soluble 100% ethanol (29 mg/ml), propylene glycol, DMSO (6.5 mg/ml).

OPTIMAL PH RANGE: Minoxidil is stable in a pH range of 3.7 to 6.7.

HOW TO CALCULATE 5% 100 ML MINOXIDIL SERUM:

A formulation of minoxidil prepared with propylene glycol:water: ethanol (15:15:70)

CALCULATION FOR MINOXIDIL: $5 \times 100 \div 100 = 5$ GM

CALCULATION FOR DISTILLED WATER: $15 - 1.66 = 13.34$ ML

CALCULATION FOR DISTILLED PROPYLENE GLYCOL: $15 - 1.66 = 13.34$ ML

CALCULATION FOR DISTILLED ETHANOL: $70 - 1.66 = 68.34$ ML

FORMULATION RECIPE:

ingredients:

- 5% minoxidil solution (active ingredient)
- Distilled water (solvent)
- Propylene glycol (humectant)
- Ethanol (solvent)
- Glycerin (humectant)
- Polysorbate 20 (surfactant)
- Fragrance (optional)
- Preservative (e.g., phenoxyethanol or benzyl alcohol)

Note: The specific percentages of each ingredient may vary based on your desired formulation. The following guide provides a general starting point.

Step 1: Prepare the Base Solution

Suzhou Greenway Biotech Co.,Ltd

Tel: +86-512-6597 8816 Email: sales@greenwaybiotec.com

Web: www.greenwaybiotec.com

1. Measure out 95 ml of distilled water and pour it into a clean container.
2. Add 2 ml of propylene glycol to the container and mix well.
3. Add 2 ml of ethanol to the container and mix well.
4. Add 1 ml of glycerin to the container and mix well.
5. Add 0.5 ml of polysorbate 20 to the container and mix well.

Step 2: Add Minoxidil 6. Measure out 5 ml of 5% minoxidil solution and add it to the base solution.

6. Mix well to ensure thorough distribution of minoxidil within the solution.

Step 3: Optional Additions 8. If desired, add a small amount of fragrance to the solution (usually a few drops). Mix well.

7. If desired, add a preservative to prevent microbial growth. Follow the manufacturer's instructions for the appropriate amount and mix well.

Step 4: Final Mixing and Storage 10. Ensure that all ingredients are thoroughly mixed together.

8. Transfer the solution to a clean, sterilized 100 ml bottle.
9. Seal the bottle tightly and label it with the contents, date of formulation, and any other relevant information.
10. Store the minoxidil solution in a cool, dry place away from direct sunlight.

Note: This formulation guide provides a general framework for preparing a 5% minoxidil solution. However, it is important to note that formulating and handling chemicals can be potentially hazardous. It is recommended to consult with a qualified professional or pharmacist to ensure safety and accuracy when formulating medications.