

Elixirs

Experiment 2 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To prepare, compare and label the formulations listed in this practical using the assigned formula.

Principle

Elixirs are sweetened oral liquids that may use a mixed solvent system. Solubility can change when aqueous and alcoholic portions are combined.

Requirements

- Assigned master formulas and ingredients for the formulations listed below.
- Balance, beakers, measuring cylinders, stirring equipment and compatible containers.

Procedure

1. Calculate the formula

Record the ingredient roles and permitted solvent composition for each elixir.

2. Prepare separate portions

Dissolve ingredients in the solvent portion in which the formula specifies they are soluble.

3. Mix gradually

Combine the prepared portions with stirring in the stated order. Observe whether dilution causes turbidity.

4. Complete and assess

Adjust to final quantity and inspect again after the assigned standing period.

5. Label

Record the complete product name, concentration, route, solvent-related label requirements and assigned storage.

Preparations in This Practical

Preparation	Formulation role / method distinction
Piperazine Citrate Elixir BP	Prepare the water-soluble component and blend with the specified sweetened solvent vehicle.
Cascara Elixir BPC	Use the stated Cascara preparation; combine solvent portions gradually to avoid precipitation.
Paracetamol Elixir BPC	Dissolve paracetamol in the specified solvent component before controlled addition to the vehicle; inspect for delayed crystallisation.

Pharmaceutics

Evaluation and Label

- Check clarity, precipitation, flavour component compatibility and final quantity.
- Protect volatile solvents from avoidable evaporation and ignition sources.

Observations and Record

Preparation	Batch size / yield	Appearance and checks
Piperazine Citrate Elixir BP	_____	_____
Cascara Elixir BPC	_____	_____
Paracetamol Elixir BPC	_____	_____

Worked Example

The numbers below are illustrative; enter your own observations in the record.

- Scale factor = required final quantity / quantity in the master formula.
- Illustration: a 100 mL formula scaled to 30 mL has factor 0.30; 5 g of an ingredient becomes 1.5 g.
- Percentage w/v means grams in 100 mL of final preparation; percentage w/w means grams in 100 g of final preparation.

Result

Record each preparation, formula version, actual yield, evaluation, container and complete label.

Precautions

- Record which official or college formula and strength were used. The historic IP, BP, BPC and NF titles in the syllabus do not establish a current market specification.
- Avoid confusing the amount of vehicle added with the final volume or mass.
- Use an appropriate route label; a teaching batch is not supplied to a patient.
- Check clarity, precipitation, flavour component compatibility and final quantity.
- Protect volatile solvents from avoidable evaporation and ignition sources.

Viva Questions and Answers

1. Why use mixed solvents?

They permit incorporation of ingredients with different solubility needs.

2. Why can dilution produce a precipitate?

The final solvent mixture may dissolve less of an ingredient than the original solvent portion.

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