

3. Prepare any Double Strength Chloroform Water BP required.
4. Weigh all solids on a Class II or electronic balance.
5. Dissolve all soluble solids in the vehicle in a small glass beaker using the same procedures as outlined in Chapter 2.
6. Mix any insoluble diffusible powders in a porcelain mortar using the 'doubling-up' technique to ensure complete mixing (see key point below).
7. Add a small quantity of the vehicle (which may or may not be a solution of the soluble ingredients) to the solids in the mortar and mix using a pestle to form a smooth paste.
8. Add further vehicle in small quantities, and continue mixing until the mixture in the mortar is of a pourable consistency.
9. Transfer the contents of the mortar to a conical measure of suitable size.
10. Rinse out the mortar with more vehicle and add any rinsings to the conical measure.
11. Add remaining liquid ingredients to the mixture in the conical measure. (These are added now, as some may be volatile and therefore exposure whilst mixing needs to be reduced to prevent loss of the ingredient by evaporation.)
12. Make up to final volume with vehicle.
13. Stir gently, transfer to a suitable container, ensuring that all the solid is transferred from the conical measure to the bottle, and label ready to be dispensed to the patient.

### General method for the preparation of a suspension containing an indiffusible solid

Oral indiffusible suspensions are prepared using the same basic principles as for oral diffusible suspensions. The main difference is that the preparation will require the addition of a suspending agent. The suspending agent of choice will normally be combined with the indiffusible solid using the 'doubling-up' technique before incorporation into the product.

1. Check the solubility in the vehicle of all solids in the mixture.

## Tips

Alternatively, the contents of the mortar could be transferred directly to a pre-prepared tared container. Rinsings from the mortar and other liquid ingredients could then be added to the bottle before making up to final volume. This would prevent any possible transference loss caused by powders sedimenting in the conical measure.

## KeyPoints

### The 'doubling-up' technique

1. Weigh the powder present in the smallest volume (powder A) and place in the mortar.
2. Weigh the powder present in the next largest volume (powder B) and place on labelled weighing paper.
3. Add approximately the same amount of powder B as powder A in the mortar.
4. Mix well with pestle.
5. Continue adding an amount of powder B that is approximately the same as that in the mortar and mix with the pestle, i.e. doubling the amount of powder in the mortar at each addition.
6. If further powders are to be added, add these in increasing order of volume as in parts 3, 4 and 5 above.