

Interim formula for Double Strength Chloroform Water BP:

Concentrated Chloroform Water BPC 1959
Potable water

5 ml
to 100 ml

4.

- a. Sodium Bicarbonate BP is soluble 1 in 11 in water (*British Pharmacopoeia* 1988, p 509). Therefore to dissolve 12 g Sodium Bicarbonate BP a minimum of $12 \times 11 = 132$ ml of water would be required.
- b. Double Strength Chloroform Water BP and potable water would be used as the vehicle as per the product formula.
- c. Double Strength Chloroform Water BP is included in this product as the preservative as per the product formula.
- d. Concentrated Peppermint Emulsion BP is added as a flavouring as per the product formula.

The following method would be used to prepare 150 ml of Magnesium Carbonate Mixture BPC from the formula above:

1. Using the master formula from the *British Pharmaceutical Codex* for 1000 ml of final product, calculate the quantity of ingredients required to produce the final volume needed (150 ml).
2. Calculate the composition of a convenient quantity of Double Strength Chloroform Water BP, sufficient to satisfy the formula requirements but also enabling simple, accurate measurement of the concentrated component.

Method of compounding for Double Strength Chloroform Water BP:

- a. In this case, 75 ml of Double Strength Chloroform Water BP is required and so it would be sensible to prepare 100 ml. To prepare 100 ml Double Strength Chloroform Water BP, measure 5 ml of Concentrated Chloroform Water BPC 1959 accurately using a 5 ml conical measure.
- b. Add approximately 90 ml of potable water to a 100 ml conical measure (i.e. sufficient water to enable dissolution of the concentrated chloroform component without reaching the final volume of the product).
- c. Add the measured Concentrated Chloroform Water BPC 1959 to the water in the conical measure.
- d. Stir gently and then accurately make up to volume with potable water.
- e. Visually check that no undissolved chloroform remains at the bottom of the measure.

Noting that sodium bicarbonate is soluble 1 in 11 with water, a minimum of 11 ml of water would be required to dissolve 1 g of sodium bicarbonate. The final volume of Magnesium Carbonate Mixture BPC required (150 ml) will contain 12 g of Sodium Bicarbonate BP. As 1 g of sodium bicarbonate is soluble in 11 ml, 12 g is soluble in 132 ml ($12 \times 11 = 132$ ml). Therefore a minimum of 132 ml of vehicle would be required to dissolve the 12 g of sodium bicarbonate in this example. For ease of compounding choose a convenient volume of vehicle, say 135 ml, in which to dissolve the solute initially. When choosing the amount of vehicle to use for