

quantity for a Class II balance. Therefore it is recommended to follow the double (serial) dilution process.

A concentrated powder where every 200 mg of this concentrate (mix X) contains 100 mg Codeine Phosphate BP (mix X contains 100 mg/200 mg) needs to be prepared.

As 100 mg cannot be accurately weighed, the quantities in mix X need to be adjusted. To keep mix X the same concentration, both parts of the concentration ratio must be multiplied by the same factors:

$$2 \times 100 \text{ mg} = 200 \text{ mg}$$

$$2 \times 200 \text{ mg} = 400 \text{ mg}$$

Therefore mix X must have a concentration 200 mg/400 mg (200 mg Codeine Phosphate BP per 400 mg of mix X).

As we must have exact weights, the quantities for mix X are:

Codeine Phosphate BP 200 mg

Lactose BP 200 mg (i.e. to 400 mg)

Therefore the final formula for preparation for the 10 powders, mix Y, will be:

Mix X 200 mg (containing 100 mg Codeine Phosphate BP)

Lactose BP to 2000 mg (1800 mg)

4. Method of preparation

a. Solubility where applicable

Not applicable.

b. Vehicle/diluent

Lactose BP is used as a diluent (unless the patient is lactose-intolerant).

c. Preservative

No preservative is included in the preparation.

d. Flavouring when appropriate

Oral powders are swallowed with a draught of water and, as such, do not require flavouring.

Method for preparing Codeine Phosphate 10 mg unit dose powders using the above formula

1. Weigh 200 mg Codeine Phosphate BP using a Class II or electronic balance.
2. Transfer to a porcelain mortar.
3. Weigh 200 mg Lactose BP using a Class II or electronic balance.
4. Add the Lactose BP to the Codeine Phosphate BP in the mortar using the 'doubling-up' technique.