

5. If the suppository is to contain insoluble, coarse powders, these must be ground down in a glass mortar before incorporation.
6. It is important not to overheat the base, which may change its physical characteristics. Find the melting point of the base and heat it to about 5–10°C less than the melting point. (There should still be some solid base present.) Hold the evaporating basin in the palm of your hand and stir (do not use the thermometer to stir) to complete the melting process.
7. Immiscible liquids and insoluble solids should be incorporated into the fatty base by levigation (wet grinding). The substance should be rubbed into the minimum quantity of molten base on a tile using a spatula. The ‘shearing’ effect will not be obtained if too much base is used, resulting in a gritty product.
8. The paste obtained in step 7 above should be returned to the evaporating basin with the remainder of the base, stirring constantly.
9. The molten mass should be poured into the mould when it is just about to solidify. (This is usually judged by experience. Look for a slight sheen on the surface of the mass, similar to a skin forming on custard as it cools.)
10. Pour the mass into the mould uniformly in one movement.
11. Allow the mixture to overfill slightly but not to run down the sides of the mould (if this happens, it is likely to be due to the mixture still being too hot).
12. When the suppositories have contracted, but before they have set completely, trim off the excess suppository base. This can easily be achieved by rubbing the flat blade of the spatula over the top of the mould.
13. After further cooling, when the suppositories have set, loosen the screw and tap once sharply on the bench. Remove the suppositories carefully (avoid overhandling or damaging the suppositories with your nails).
14. Pack the required number of suppositories individually in foil and place in an amber wide-necked jar.

Alternative methods would be used for the preparation of suppositories (or pessaries) using non-fatty bases (for example, using glycero-gelatin bases – see Example 7.2).

Worked examples

Example 7.2

The preparation of Glycerol Suppositories BP

You receive a prescription in your pharmacy with the following details: