ointment base may include a mixture of waxes, fats and oils, of which some are solid at room temperature and others are liquid.

- Hard: Paraffin BP, Beeswax BP, Cetostearyl Alcohol BP
- Soft: Yellow and White Soft Paraffin BP. Wool Fat BP
- Liquid: Liquid Paraffin BP and vegetable oils.

General method (fusion)

- 1. Always make excess as transference losses will always occur.
- 2. Determine the melting points of the fatty bases and then melt together. Starting with the base with the highest melting point, each base should be melted at the lowest possible temperature as the mixture progressively cools.
- **3.** Add the ingredients to an evaporating basin over a water bath (see Figure 5.1) to avoid overheating use a thermometer to check the temperature regularly.
- 4. As the first base cools, add the ingredients with decreasing melting points at the respective temperatures, stirring continuously to ensure a homogeneous mix before leaving to set. It is important to stir gently to avoid incorporating excess air, which could result in localised cooling and a lumpy product.

The incorporation of powders into an ointment base

- **Soluble solids** should be added to the molten fatty bases at the lowest possible temperature and the mixture stirred until cold. Alternatively, if using a pre-prepared base, soluble solids may be incorporated using the method employed for insoluble solids.
- **Insoluble solids** should be incorporated using a glass tile and spatula (see Figure 5.2). If there is more than one powder to be added, these should be mixed in a mortar using the 'doubling-up' method.
- Coarse powders. A minimum quantity of molten fatty base should be placed in the centre of the glass tile and used to levigate the powders. A considerable shearing force should be applied to avoid a gritty product.

The powder/fatty base mixture may then either be returned to the evaporating basin with the remaining fatty base and stirred until cold or the remaining fatty base in the evaporating basin may be allowed to cool and triturated with the powder/fatty base mixture on the tile.

 Fine powders may be triturated into the otherwise finished ointment on a glass tile. Small amounts of powder should be added to an equal amount of ointment, i.e. using the 'doublingup' technique. These should be well triturated to incorporate all of the ointment base. Alternatively, a small amount of