coal tar or salicylic acid. It is easier to apply a paste to a discrete skin area such as a particular lesion or plaque and not therefore compromise the integrity of healthy skin.

Pastes are also useful for absorbing harmful chemicals such as the ammonia which is released by bacterial action on urine and so are often used in nappy products. Also, because of their high powder content, they are often used to absorb wound exudates.

Because pastes are so thick they can form an unbroken layer over the skin which is opaque and can act as a sun filter. This makes them suitable for use for skiers as they prevent excessive dehydration of the skin (wind burn) in addition to sun blocking.

The principal use of pastes was traditionally as an antiseptic, protective or soothing dressing. Often before application the paste was applied to lint and then applied as a dressing.

Gels

Pharmaceutical gels are often simple phase, transparent semi-solid systems that are being increasingly used as pharmaceutical topical formulations. The liquid phase of the gel may be retained within a three-dimensional polymer matrix. Drugs can be suspended in the matrix or dissolved in the liquid phase.

Advantages of gels

1. Stable over long periods of time
2. Good appearance
3. Suitable vehicles for applying medicaments to skin and mucous membranes giving high rates of release of the medicament and rapid absorption.

Gels are usually translucent or transparent and have a number of uses:

- Anaesthetic gels
- Coal tar gels for use in treatment of psoriasis or eczema
- Lubricant gels
- Spermicidal gels.

General method

This section contains information on the preparation of ointments by fusion and the incorporation of both solids and liquids into ointment bases.

Fusion

This involves melting together the bases over a water bath (see Figure 5.1) before incorporating any other ingredients. The