## Example 5.3

## The preparation of Dermovate Cream 25%

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

Patient: Mr Peter Johnson, 14 Vauxhall Parade, Astonbury

**Age**: 63

**Prescription:** Dermovate Cream 1:3

**Directions:** Apply bd **Mitte:** 50 g

#### 1. Use of the product

Dermovate contains 0.05% clobetasol propionate, a corticosteroid for topical application for the short-term treatment of severe resistant inflammatory skin disorders. It is usually applied thinly 1–2 times daily for up to 4 weeks. Maximum 50 g of 0.05% preparation per week (*British National Formulary* 51st edn, p 577).

## 2. Is it safe and suitable for the intended purpose?

It is reasonably common to dilute proprietary creams to produce less potent products for the treatment of inflammatory skin disorders. This is a 1 in 4 dilution (1:3) of a potent topical steroid. Therefore, so long as the dilution is stable (see below), the product will be safe and suitable for the intended purpose.

# 3. Calculation of formula for preparation

Prepare 50 g of Dermovate Cream 1:3.

Product formula (i.e. the diluent to use) must be decided by the compounder. Refer to a diluent directory which in this case states that, although the dilution of the product is not recommended by the manufacturer, in cases where it is insisted upon, the following may be used:

- Aqueous Cream BP
  Only stable if less than 50% of the resultant cream.
  Therefore unsuitable for this formulation.
- Buffered Cream BPMay be used but can raise the pH of the resulting cream.
- Cetomacrogol Cream (Formula A) BPC
  No problems with dilution recorded.

Therefore the diluent of choice would be Cetomacrogol Cream (Formula A) BPC in this instance.

Note: Suitable sources to provide information on the dilution of creams and ointments would be:

- National Pharmacy Association Diluent Directory
- product data sheet (Summary of Product Characteristics SPC)
- reports in the pharmaceutical literature
- personal contact with product manufacturer.