

**Strength:** Contains 0.25% of zinc sulfate (limits 0.22 to 0.28% w/v of ZnSO<sub>4</sub>·7H<sub>2</sub>O).

**Method:** Sterilise by heating in an autoclave.

**Note:** These eye drops should be protected from light. Adrenaline solution BP contains 0.1% w/v adrenaline as adrenaline acid tartrate.

**Use:** Astringent.

## Eye lotions

Eye lotions are sterile aqueous solutions that are used in large volume. They are intended for use on one occasion only. Preservatives are added only if prescribed. They should be prepared under conditions appropriate for the preparation of sterile products.

**Containers and storage:** Fluted bottles. Store at less than 25 °C (unless specified otherwise).

Eye lotions for firstaid should be in bottles with an outlet that permits the lotion to be poured straight out of the container into the eye. Plastic squeeze-bottles with a nozzle stopper permitting air entry and with the outlet covered by a removable cap are suitable.

**Labelling:** The container should be labelled CAUTION: NOT TO BE TAKEN. In addition, directions should be given that any portion of the solution not used after the seal is first broken should be discarded—e.g. CONTAINS NO PRESERVATIVE. USE ONCE AND DISCARD ANY RESIDUE.

### disodium edetate eye lotion

disodium edetate ..... 0.4 g  
water for injections BP ..... to 100 mL

**Method:** Sterilise by heating in an autoclave.

**Use:** For removing calcium deposits in the cornea.

### sodium bicarbonate eye lotion

*Collyr. Sod. Bicarb.; alkaline eye lotion*

sodium bicarbonate ..... 3.5 g  
water for injections BP ..... to 100 mL

**Method:** Place the solution in the final container and pass carbon dioxide through it for at least one minute. Seal the container so as to be gas-tight and sterilise by heating in an autoclave. The container must not be opened until at least two hours after the solution has cooled to room temperature.

**Use:** To be applied undiluted for removing mucous from the eye.

## Gels

Gels are oil-free, water-miscible, viscous preparations that are used for the application of water-soluble medicaments to body surfaces. Tragacanth gels (glycanths) or methylcellulose gels are used (see 'Mucilages', p. 48). They have the advantage over aqueous solutions of maintaining contact with skin and mucous membranes for longer periods. Methylcellulose provides a more durable adhesive film compared with other gelling agents. These gels are compatible with anionic and most cationic substances. They may be sterilised by autoclaving.

**Containers and storage:** Gels should be stored and supplied in well-sealed containers that prevent evaporation. Store below 25 °C unless specified otherwise.

**Expiry:** Gels containing tragacanth are prone to bacterial contamination and should be discarded 28 days after manufacture unless a shorter period is indicated.

### chlorhexidine gel

chlorhexidine gluconate solution BP ..... 2.5 mL  
tragacanth ..... 2.5 g  
glycerol ..... 25 mL  
purified water, freshly boiled and cooled ..... to 100 g

**Strength:** Contains 0.5% of chlorhexidine gluconate (limits 0.42 to 0.58% w/w of C<sub>22</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>10</sub>·2C<sub>6</sub>H<sub>12</sub>O<sub>7</sub>).

**Method:** Mix the tragacanth with the glycerol and add most of the purified water. Heat to boiling, cool, add the chlorhexidine gluconate solution, adjust to weight, and mix.

**Note:** If the gel is to be applied to broken skin or used for surgical procedures, it should be produced as a sterile product in single-use units. This preparation should be protected from light.

Chlorhexidine gluconate solution BP is an aqueous solution containing 19 to 21% w/v of chlorhexidine gluconate.

**Use:** Antiseptic lubricant.

### glyco-gelatin gel

*glyco-gelatin base*

gelatin ..... 25 g  
glycerol (by weight) ..... 40 g  
purified water, freshly boiled and cooled ..... to 100 g

**Method:** Soak the gelatin in 80 g of purified water in a tared dish. Add the glycerol and heat in a water bath, stirring occasionally, until the gelatin has dissolved.