

sodium bicarbonate ear drops

Aurist. Sod. Bicarb.

sodium bicarbonate 5 g
 glycerol 30 mL
 purified water, freshly boiled and cooled to 100 mL

Strength: Contains 5% of sodium bicarbonate (limits 4.7 to 5.3% of NaHCO₃).

Method: Dissolve the sodium bicarbonate in 60 mL of purified water without the aid of heat, add the glycerol and make to volume with purified water.

Note: These ear drops should be recently prepared.

Use: Removal of ear wax.

spirit ear drops

Aurist. Spirit.

ethanol (90%) 50 mL
 purified water, freshly boiled and cooled to 100 mL

Use: Drying agent.

Elixirs

Elixirs are aromatic liquid preparations that are a convenient means of administering potent or potentially nauseating medicaments in a palatable form in small dose-volumes. The solvent frequently contains a high proportion of ethanol and/or syrup, but other solvents such as glycerol are sometimes used.

Containers and storage: Well-sealed containers. Store at less than 25 °C unless otherwise specified.

Expiry: 28 days after preparation.

Eye drops

Eye drops are aqueous or oily solutions or suspensions for instillation into the eye. They must be sterile and be prepared under conditions validated as appropriate for the preparation of sterile products.

Sterilisation: The procedure recommended for sterilisation is stated in each formula. The methods stated, such as ‘sterilise by heating in an autoclave’ or ‘sterilise by filtration’, are those specified in the British Pharmacopoeia.

Vehicle: For aqueous solutions, water for injections BP should be used; this may be replaced by freshly distilled water whenever the eye drops are sterilised immediately. Eye drops should be prepared in a vehicle which is bactericidal and fungicidal. The eye drops described in

this handbook should be clarified, where practicable, by filtration through a membrane filter. Wherever possible they have been formulated to be approximately isotonic with lachrymal secretion (equivalent to 0.9% w/v sodium chloride), using sodium chloride or another suitable adjusting substance (see ‘Isosmotic and isotonic solutions’, Section G).

Prescribing: The strengths of eye drops in this handbook are those commonly used in ophthalmic practice. If a variation in the proportion of active ingredient is desired, the prescriber should state the required strength, and any required adjustment to the vehicle will be made by the pharmacist.

Buffered vehicles for eye drops may be required: suitable formulae are set out in ‘Buffer solutions’, Section G. It should be recognised that such vehicles may reduce the time and temperature stability of certain medicaments; modified methods of preparation and sterilisation may be required.

Should a thickened vehicle be required, 0.3% w/v of hypromellose 4,500 may be added.

Following repeated application of eye drops at short intervals or over a long period, the user may develop a sensitivity to certain preservatives included in the formulation. Should this occur, a different preservative may be substituted, having due regard to compatibility.

Containers and storage: Eye drops should be dispensed in containers capable of being closed so as to exclude micro-organisms. Dropper bottles are suitable, but the user must be cautioned about avoiding contamination during use. Containers made of materials other than glass and the rubber teats used on droppers should be impregnated with any bactericide or preservative included in the eye drops. Containers made of materials other than glass may be permeable to oxygen and be unsuitable for formulations which undergo oxidation; they may also release unwanted substances (e.g. plasticisers). The volume of solution dispensed in each container should be limited so as to discourage prolonged storage. For drops containing antibiotics, cocaine or corticosteroids, the volume should generally be limited to 5 mL. Store at less than 25 °C unless specified otherwise.

Labelling: The label on the container must bear the name and the strength of the preservative used and the date of preparation. The container should be labelled CAUTION: NOT TO BE TAKEN.

Expiry: The patient should be advised to discard unused eye drops 28 days after opening the container (unless a shorter or longer period is directed).

Note: The benzalkonium chloride solution used in some of the eye drops described in this handbook is