

Ear Drops

- Instilled into ear with dropper.
- Prepared in water, glycerin, propylene glycol or diluted alcohol.
- Cleaning ear and softening the wax and for treating mild infection.
- **Container:-** colored, fluted glass bottles with a dropper in the cap. Also dispensed in plastic containers.
- **Label:-** for external use only.
- **Storage:-** Store in a cool place.

Prepare and dispense 25ml of soda glycerin ear drop.

Rx

Sodium bicarbonate	5g
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Glycerin	30ml
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Water up to	100ml
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Direction- Prepare ear drops.

Use- used to relieve itching in the ear and soften the wax.

Eg. of marketed formulations- Otic ear drop, waxonil, Genticyn ear drops, Conflox ear drops.

Nasal Drops

- Instilled into nose with dropper.
- Oily vehicle not used as it inhibits movement of cilia and may cause lipoid pneumonia on prolonged use.
- Nasal drops should be isotonic with 0.9% sodium chloride having neutral pH .
- Viscosity similar to nasal secretion using 0.5 % methyl cellulose.
- Buffering capacity of nasal mucosa is low and strong alkali can cause considerable damage to the cilia , so it is advisable to use phosphate buffer of pH 6.5 as a vehicle .

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- **Container:-** colored fluted bottles with dropper or suitable plastic container.
 - **Label:-** for external use only.
 - **Storage:-** cool place.
 - Eg. of marketed formulation- otrivin nasal drops, Nasivion nasal drops

- Ephedrine Nasal Drops B.P.C.
 - Ephedrine hydrochloride 0.5g
 - Chlorobutol 0.5g
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- Sodium Chloride 0.5g
 - Water Up to 1000ml
 - Method- Dissolve the ephedrine hydrochloride, chlorobutol, Sodium chloride in warm water. Cool, Filter if necessary and make the volume through the filter. Transfer the nasal drops in to the container , label and dispense.

Nasal Sprays

- Reduce nasal congestion and treat infections.
- **It retain nasal solutions in the droplet form in nasal tract.**
- Hence sprayed in form of coarse droplets by using atomizers or plastic squeeze bottles.
- it should be isotonic and buffered at pH 6.2.
- They may contain antibiotics and antihistaminic.
- **Container:-** small color fluted bottles, plastic squeeze bottles, atomizers or pressured aerosol.
- **Storage:-** well filled air tight containers. Protected from light.
- Eg- of marketed formulation- Rhinocort nasal spary , Econase nasal spary.

- Prepare and dispense 100ml of Nasal spray
- Rx
- Menthol 2g
- Camphor 2g
- Thymol 2g
- Eucalyptus oil 5ml
- Liquid Paraffin up to 100ml

Method- Triturate menthol , thymol, and camphor in a dry mortar. Add eucalyptus oil. Transfer to a dry measure. Rinse the mortar with liquid paraffin and add more of liquid paraffin to make up the volume. Transfer to the container , label and dispense.



Thank You