AUSTRALIAN PRODUCT INFORMATION

– CHLORSIG (CHLORAMPHENICOL) EYE DROPS AND EYE OINTMENT

1 NAME OF THE MEDICINE

Chloramphenicol

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

CHLORSIG EYE DROPS contains 0.5% w/v chloramphenicol.

CHLORSIG EYE OINTMENT contains 1.0% w/w chloramphenicol.

For the full list of excipients, see Section 6.1 List of excipients.

3 PHARMACEUTICAL FORM

CHLORSIG EYE DROPS is a clear to slightly hazy colourless, slightly viscous liquid and odourless. It contains chloramphenicol 0.5% w/v in aqueous base thickened with hypromellose. Phenylmercuric acetate (0.002% w/v) is used as a preservative.

CHLORSIG EYE OINTMENT is a yellowish-white, slightly translucent suspension ointment, free of visible contamination, with an odour faintly of paraffin and wool fat. It contains chloramphenicol 1.0% w/w in a sterile oculentum base. Contains no preservatives.

4 CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

For the treatment of bacterial conjunctivitis. For use under medical supervision only in the treatment of other superficial ocular infections caused by chloramphenicol-sensitive organisms.

4.2 DOSE AND METHOD OF ADMINISTRATION

CHLORSIG EYE DROPS:

Adults and children 2 years and over: Instil 1 or 2 drops in the affected eye(s) every two to six hours for two to three days. The interval between applications may then be increased. Treatment should be continued for at least 48 hours after the eye appears normal. Do not use for more than 5 days in total except on medical advice.

To minimise contamination do not allow the dropper to contact the surface of the eye.

The systemic absorption of CHLORSIG eye drops can be minimised by applying gentle pressure on the tear-duct for approximately one minute immediately after application.

Discard solution within one month of opening container.

CHLORSIG EYE OINTMENT:

Adults and children 2 years and over: Apply 1.5 cm of ointment into the affected eye(s) every three hours. If ointment is used together with drops for day and night coverage, 1.5 cm should be applied before bedtime, while using the drops during the day. Treatment should be continued for at least 48 hours after the eye appears normal. Do not use for more than 5 days in total except on medical advice. To minimise contamination do not allow the tip to contact the surface of the eye.

CHLORSIG is not recommended for children under 2 years except on medical advice.

4.3 CONTRAINDICATIONS

Chloramphenicol is contraindicated in individuals with a history of hypersensitivity to any excipients and/or toxic reaction to the drug.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Identified precautions

Bone marrow hypoplasia, including aplastic anaemia and death, has been rarely reported following local application of chloramphenicol. Chloramphenicol should not be used when less potentially dangerous agents would be expected to provide effective treatment. Ophthalmic agents may retard corneal wound healing.

The use of this antibiotic, as with other antibiotics, may result in the overgrowth of nonsusceptible organisms, including fungi. If infections caused by nonsusceptible organisms appear during therapy, its use should be discontinued and appropriate measures should be taken. In all serious infections, the topical use of chloramphenicol should be supplemented by appropriate systemic medication.

The mechanism for the irreversible aplastic anaemia following ophthalmic use of chloramphenicol has not been established.

Chloramphenicol eye drops and ointment should **not** be recommended for OTC use under the following circumstances:

- Photophobia
- Severe pain in the eye or pain and swelling around the eye
- Loss of, reduced or blurred vision
- Restriction of eye movement
- Cloudy cornea
- Copious yellow-green purulent discharge that accumulates after being wiped away
- Contact lens wear
- Abnormal pupils
- Injury to the eye or suspicion of a foreign body in the eye
- History of welding without eye protection immediately prior to onset of symptoms
- Glaucoma
- Dry eye syndrome
- Patient is a contact lens user
- Patient is using other eye drops or eye ointments at the time of presentation
- Patient has had eye surgery or laser treatment in the past six months

- Individual or family history of bone marrow problems
- Recent overseas travel
- Patient has had similar symptoms in the past
- Patient feels unwell

In these cases, referral to a doctor or optometrist is required.

Instructions to Patients

- If symptoms worsen at any time or if the eye infection does not improve within 48 hours, seek prompt medical advice.
- Patients who wear contact lenses should be advised to seek advice from their doctor or optometrist before using CHLORSIG. Contact lenses should not be worn during the course of CHLORSIG treatment. If wearing **hard** or **disposable** contact lenses, patients can start using their lenses again after successfully completing the course of treatment. If wearing **soft** contact lenses, patients should wait 24 hours after successfully completing a course of treatment before starting to use their lenses again.

Use in hepatic impairment

No data available

Use in renal impairment

No data available

Use in the elderly

No data available

Paediatric use

No data available

Effects on laboratory tests

No data available

4.5 INTERACTIONS WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTIONS

No data available

4.6 FERTILITY, PREGNANCY AND LACTATION

Effects on fertility

No data available. Excipients containing boron such as boric acid or borate compounds have been shown to cause reduced fertility and effects on embryofoetal development in animal studies and this appears to be dose related. The relevance of this to humans is uncertain.

Use in pregnancy – Pregnancy Category A

If given systematically to the mother shortly before parturition or whilst breastfeeding, chloramphenicol may cause bone marrow suppression of the neonate or the "grey baby syndrome", characterised by cyanosis and hypothermia, owing to the limited glucuronidating capacity of the neonate's liver. However, limited absorption following ophthalmic use at the recommended dosage is generally not expected to pose a risk to the foetus or neonate.

Use in lactation

Systematically absorbed/administered forms of chloramphenicol enter the foetal circulation and are distributed into breast milk. If given systematically to the mother shortly before parturition or whilst breastfeeding, chloramphenicol may cause bone marrow suppression of the neonate or the "grey baby syndrome", characterised by cyanosis and hypothermia, owing to the limited glucuronidating capacity of the neonate's liver. However, limited absorption following ophthalmic use at the recommended dosage is generally not expected to pose a risk to the foetus or neonate.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

The effects of this medicine on a person's ability to drive and use machines were not assessed as part of its registration.

4.8 ADVERSE EFFECTS (UNDESIRABLE EFFECTS)

Blood dyscrasias have been reported in association with the use of chloramphenicol **(see Section 4.4 – Special Warnings and Precautions for Use).** Chloramphenicol is absorbed systemically from the eye, and toxicity has been reported following chronic exposure. Dose related toxicity following a single ocular exposure is unlikely. Local irritation with the ophthalmic form may include subjective symptoms of itching or burning. More serious side effects such as angioneurotic oedema; anaphylaxis, urticaria, fever, vesicular and maculopapular dermatitis have been reported in patients sensitive to chloramphenicol and are causes for discontinuing the medication. Similar sensitivity reactions to other materials in topical preparations also may occur.

Reporting suspected adverse effects

Reporting suspected adverse reactions after registration of the medicinal product is important. It allows continued monitoring of the benefit-risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions at www.tga.gov.au/reporting-problems.

4.9 OVERDOSE

Accidental ingestion of the drug is unlikely to cause any toxicity due to low content of antibiotic. CHLORSIG EYE DROPS contains 18.80 mg/mL of borax/boric acid as buffer with less than 0.13 mg/mL of sodium hydroxide. If the eye drops are accidentally ingested by infants or young children, Poisons Information Centre (Telephone 131126) should be contacted. The medication should be kept out of reach of children.

Treatment:

If irritation, pain, swelling, lacrimation or photophobia occur after undesired eye contact, the exposed eye(s) should be irrigated with copious amounts of room temperature water for at least 15 minutes. If symptoms persist after 15 minutes of irrigation, an ophthalmological examination should be considered.

5 PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Mechanism of action

Chloramphenicol is a broad spectrum antibiotic originally isolated from *Streptomyces venezuelae*. It is primarily bacteriostatic and acts by inhibition of protein synthesis by interfering with the transfer of activated amino acids from soluble RNA to ribosomes.

Clinical trials

No data available

5.2 PHARMACOKINETIC PROPERTIES

No data available

5.3 PRECLINICAL SAFETY DATA

Genotoxicity

No data available

Carcinogenicity

No data available

6 PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

CHLORSIG Eye Drops and CHLORSIG Eye Ointment contain the following excipients:

CHLORSIG EYE DROPS	CHLORSIG EYE OINTMENT
Phenylmercuric acetate	Paraffin - liquid
Boric acid	Paraffin - soft white
Borax	Wool fat
Hypromellose	
Sodium hydroxide	
Purified water	

6.2 INCOMPATIBILITIES

Incompatibilities were either not assessed or not identified as part of the registration of this medicine.

6.3 SHELF LIFE

In Australia, information on the shelf life can be found on the public summary of the Australian Register of Therapeutic Goods (ARTG). The expiry date can be found on the packaging.

6.4 SPECIAL PRECAUTIONS FOR STORAGE

CHLORSIG EYE DROPS:

Store between 2 - 8°C until opened. Refrigerate. Do not freeze. On opening the drops may be stored at room temperature (below 25°C). Discard 4 weeks after opening. Protect from light.

CHLORSIG EYE OINTMENT:

Store below 25°C. Discard 4 weeks after opening. Protect from light.

6.5 NATURE AND CONTENTS OF CONTAINER

Chlorsig Eye Drops: 10 mL plastic dropper bottle with tamper seals.

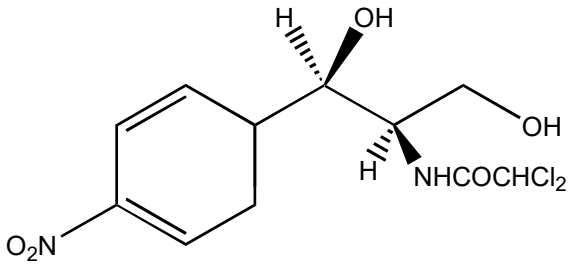
Chlorsig Eye Ointment: 4 g tube with an ophthalmic cap.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

In Australia, any unused medicine or waste material should be disposed of by taking to your local pharmacy.

6.7 PHYSICOCHEMICAL PROPERTIES

Chemical structure



CAS number *56-75-7*

Molecular formula is $C_{11}H_{12}Cl_2N_2O_5$ and a molecular weight of 323.1.

Physical and Chemical Properties:

Chloramphenicol exists as a white to greyish-white or yellowish white, fine crystalline powder or fine crystals, needles or elongated plates.

Chloramphenicol is slightly soluble in water (1 in 400), chloroform and ether. Freely soluble in ethanol (1 in 2.5), propylene glycol (1 in 7), acetone and ethyl acetate.

7 MEDICINE SCHEDULE (POISONS STANDARD)

PHARMACIST ONLY MEDICINE: S3.

8 SPONSOR

Aspen Pharma Pty Ltd
34-36 Chandos Street,
St. Leonards NSW 2065
Australia

9 DATE OF FIRST APPROVAL

Chlorsig Eye Drops: 14 October 1991

Chlorsig Eye Ointment: 14 October 1991

10 DATE OF REVISION

14 September 2021

SUMMARY TABLE OF CHANGES

Section Changed	Summary of new information
All	PI reformat as per TGA's updated guidelines
4.6	Included boron-containing excipients and fertility concerns.