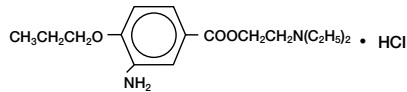


# Alcaine®

## (proparacaine hydrochloride ophthalmic solution USP) 0.5%

**DESCRIPTION:** ALCAINE® (proparacaine hydrochloride ophthalmic solution USP) 0.5% is a topical anesthetic prepared as a sterile aqueous ophthalmic solution. The active ingredient is represented by the structural formula:



Established name:

Proparacaine Hydrochloride

MW = 330.85

Chemical name:

Benzoic acid, 3-amino-4-propoxy-, 2-(diethylamino)  
ethyl ester, monohydrochloride.

Each mL contains: Active: proparacaine hydrochloride 5 mg (0.5%). Preservative: benzalkonium chloride 0.01%. Inactives: glycerin, hydrochloric acid and/or sodium hydroxide (to adjust pH), purified water. pH range 4.0-6.0.

**CLINICAL PHARMACOLOGY:** ALCAINE Solution is a rapid acting local anesthetic suitable for ophthalmic use. With a single drop, the onset of anesthesia usually begins within 30 seconds and persists for 15 minutes or longer.

The main site of anesthetic action is the nerve cell membrane where proparacaine interferes with the large transient increase in the membrane permeability to sodium ions that is normally produced by a slight depolarization of the membrane. As the anesthetic action progressively develops in a nerve, the threshold for electrical stimulation gradually increases and the safety factor for conduction decreases; when this action is sufficiently well developed, block of conduction is produced.

The exact mechanism whereby proparacaine and other local anesthetics influence the permeability of the cell membrane is unknown; however, several studies indicate that local anesthetics may limit sodium ion permeability through the lipid layer of the nerve cell membrane. This limitation prevents the fundamental change necessary for the generation of the action potential.

**INDICATIONS AND USAGE:** ALCAINE Solution is indicated for topical anesthesia in ophthalmic practice. Representative ophthalmic procedures in which the preparation provides good local anesthesia include measurement of intraocular pressure (tonometry), removal of foreign bodies and sutures from the cornea, conjunctival scraping in diagnosis and gonioscopic examination; it is also indicated for use as a topical anesthetic prior to surgical operations such as cataract extraction.

**CONTRAINDICATIONS:** This preparation is contraindicated in patients with known hypersensitivity to any component of the solution.

**WARNINGS:** NOT FOR INJECTION – FOR TOPICAL OPHTHALMIC USE ONLY. Prolonged use of a topical ocular anesthetic may produce permanent corneal opacification with accompanying loss of vision.

### PRECAUTIONS:

**General.** Proparacaine hydrochloride should be used cautiously and sparingly in patients with known allergies, cardiac disease, or hyperthyroidism. The long-term toxicity of proparacaine is unknown; prolonged use may possibly delay wound healing. Although exceedingly rare with ophthalmic application of local anesthetics, it should be borne in mind that systemic toxicity (manifested by central nervous system stimulation followed by depression) may occur.

Protection of the eye from irritating chemicals, foreign bodies and rubbing during the period of anesthesia is very important. Tonometers soaked in sterilizing or detergent solutions should be thoroughly rinsed with sterile distilled water prior to use. Patients should be advised to avoid touching the eye until the anesthesia has worn off. Do not touch dropper tip to any surface as this may contaminate the solution.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** Long-term studies in animals have not been performed to evaluate carcinogenic potential, mutagenicity, or possible impairment of fertility in males or females.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Animal reproduction studies have not been conducted with ALCAINE Solution. It is also not known whether proparacaine hydrochloride can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Proparacaine hydrochloride should be administered to a pregnant woman only if clearly needed.

**Nursing Mothers.** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when proparacaine hydrochloride is administered to a nursing woman.

**Pediatric Use.** Controlled clinical studies have not been performed with ALCAINE® Solution to establish safety and effectiveness in children; however, the literature cites the use of proparacaine hydrochloride as a topical ophthalmic anesthetic agent in children.

**ADVERSE REACTIONS:** Pupillary dilatation or cycloplegic effects have rarely been observed with proparacaine hydrochloride. The drug appears to be safe for use in patients sensitive to other local anesthetics, but local or systemic sensitivity occasionally occurs. Instillation of proparacaine in the eye at recommended concentration and dosage usually produces little or no initial irritation, stinging, burning, conjunctival redness, lacrimation or increased winking. However, some local irritation and stinging may occur several hours after the instillation.

Rarely, a severe, immediate-type, apparently hyperallergic corneal reaction may occur which includes acute, intense and diffuse epithelial keratitis; a gray, ground-glass appearance; sloughing of large areas of necrotic epithelium; corneal filaments and, sometimes, iritis with descemetitis.

Allergic contact dermatitis with drying and fissuring of the fingertips has been reported.

Softening and erosion of the corneal epithelium and conjunctival congestion and hemorrhage have been reported.

**DOSAGE AND ADMINISTRATION:**

Deep anesthesia as in cataract extraction:

Instill 1 drop every 5 to 10 minutes for 5 to 7 doses.

Removal of sutures:

Instill 1 or 2 drops 2 or 3 minutes before removal of stitches.

Removal of foreign bodies:

Instill 1 or 2 drops prior to operating.

Tonometry:

Instill 1 or 2 drops immediately before measurement.

**HOW SUPPLIED:** ALCAINE (Proparacaine Hydrochloride Ophthalmic Solution, USP) 0.5% is supplied in 15 mL DROP-TAINER® dispensers.

**NDC 0998-0016-15**

**Storage:** Store between 2° - 8°C (36° - 46°F). If solution shows more than a faint yellow color, it should not be used.

**Rx Only**

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PHARMACEUTICALS

ALCON LABORATORIES, INC.  
Fort Worth, Texas 76134 USA