

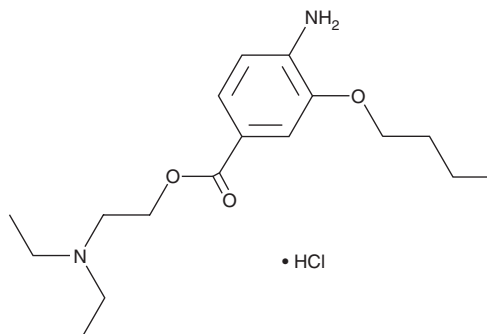
# PRODUCT INFORMATION



## Oxybuprocaine (hydrochloride)

Item No. 39978

**CAS Registry No.:** 5987-82-6  
**Formal Name:** 4-amino-3-butoxy-benzoic acid,  
2-(diethylamino)ethyl ester,  
monohydrochloride  
**Synonyms:** Benoxinate, Dorsacaine  
**MF:**  $C_{17}H_{28}N_2O_3 \cdot HCl$   
**FW:** 344.9  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Oxybuprocaine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the oxybuprocaine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Oxybuprocaine (hydrochloride) is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of oxybuprocaine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. Oxybuprocaine (hydrochloride) is soluble ( $\geq 10$  mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

### Description

Oxybuprocaine is an anesthetic.<sup>1</sup> Intrathecal administration of oxybuprocaine reduces motor function, decreases righting behaviors in the placement test, and increases latency to paw withdrawal in the hot plate test in rats ( $ED_{50}$ s = 0.43, 0.5, and 0.31  $\mu$ mol/kg, respectively). Topical application of oxybuprocaine (0.4% w/v) reduces corneal sensitivity in the corneal touch test in dogs.<sup>2</sup> Formulations containing oxybuprocaine have been used to induce anesthesia prior to ocular surgery.

### References

1. Hung, C.-H., Wang, J.-J., Chen, Y.-C., *et al.* Intrathecal oxybuprocaine and proxymetacaine produced potent and long-lasting spinal anesthesia in rats. *Neurosci. Lett.* **454**(3), (2009).
2. Douet, J.-Y., Michel, J., and Regnier, A. Degree and duration of corneal anesthesia after topical application of 0.4% oxybuprocaine hydrochloride ophthalmic solution in ophthalmically normal dogs. *Am. J. Vet. Res.* **74**(10), 1321-1326 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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