# PRODUCT INFORMATION



# Benzetimide (hydrochloride)

Item No. 34527

**CAS Registry No.:** 5633-14-7

3-phenyl-1'-(phenylmethyl)-[3,4'-Formal Name:

bipiperidine]-2,6-dione, monohydrochloride

Synonyms: Dioxatrine, R 4929, Spasmentral

MF: C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> • HCl

FW: 398.9 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

## **Laboratory Procedures**

Benzetimide (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the benzetimide (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Benzetimide (hydrochloride) is slightly soluble in chloroform (sonicated).

Benzetimide (hydrochloride) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

## Description

Benzetimide is a muscarinic acetylcholine receptor (mAChR) antagonist. 1 It induces mydriasis and inhibits pilocarpine-induced salivation and lacrimation in rats (ED<sub>50</sub>s = 0.06 and 0.04 mg/kg, respectively).<sup>2</sup>

#### References

- 1. Gray, J.A., Lüllmann, H., Mitchelson, F.J., et al. Stereoselective binding in cardiac tissue of the enatiomers of benzetimide, and antimuscarinic drug. Br. J. Pharmacol. 56(4), 485-490 (1976).
- 2. Janssen, P.A.J. and Niemegeers, C.J.E. The peripheral and central anticholinergic properties of benzetimide (R 4929) and other atropine-like drugs as measured in a new anti-pilocarpine test in rats. Psychopharmacologia 11(3), 231-254 (1967).

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

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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