

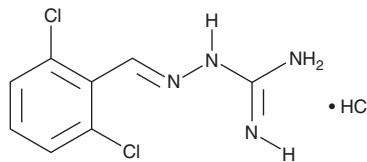
# PRODUCT INFORMATION



## Guanabenz (hydrochloride)

Item No. 10851

**CAS Registry No.:** 23113-43-1  
**Formal Name:** 2-[(2,6-dichlorophenyl)methylene]-hydrazinecarboximidamide, monohydrochloride  
**Synonyms:** Wytensin  
**MF:** C<sub>8</sub>H<sub>8</sub>Cl<sub>2</sub>N<sub>4</sub> • HCl  
**FW:** 267.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 222, 274 nm  
**Supplied as:** A crystalline 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

Guanabenz (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the guanabenz (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Guanabenz (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of guanabenz (hydrochloride) in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and dimethyl formamide.

Guanabenz (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, guanabenz (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Guanabenz (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Guanabenz is an α<sub>2</sub>-adrenergic receptor agonist (effective concentrations 10-100 nM) with hypotensive effects.<sup>1,2</sup> It also competes for imidazoline I<sub>2</sub>-binding sites in brown adipose tissue (K<sub>i</sub> = 97 nM).<sup>3</sup>

### References

1. Sakakibara, Y., Muramatsu, I., Fujiwara, M., *et al.* Effects of guanabenz on the adrenergic mechanism in rabbit arterial strips. *Jpn. J. Pharmacol.* **31(6)**, 1029-1036 (1981).
2. Sica, D.A. Centrally acting antihypertensive agents: An update. *J. Clin. Hypertens. (Greenwich)* **9(5)**, 399-405 (2007).
3. Römer, L., Wurster, S., Savola, J.M., *et al.* Identification and characterization of the imidazoline I<sub>2b</sub>-binding sites in the hamster brown adipose tissue as a study model for imidazoline receptors. *Arch. Physiol. Biochem.* **111(2)**, 159-166 (2003).

#### 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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