

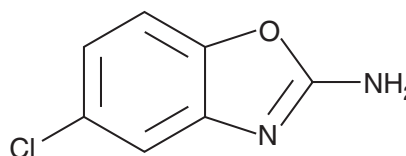
# PRODUCT INFORMATION



## Zoxazolamine

Item No. 17565

**CAS Registry No.:** 61-80-3  
**Formal Name:** 5-chloro-2-benzoxazolamine  
**Synonyms:** 2-Amino-5-chlorobenzoxazole, Contrazole, NSC 24995  
**MF:** C<sub>7</sub>H<sub>5</sub>ClN<sub>2</sub>O  
**FW:** 168.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 244, 286 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

Zoxazolamine is supplied as a crystalline solid. A stock solution may be made by dissolving the zoxazolamine in the solvent of choice, which should be purged with an inert gas. Zoxazolamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of zoxazolamine in ethanol is approximately 10 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Zoxazolamine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, zoxazolamine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Zoxazolamine 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

Zoxazolamine is a potent skeletal muscle relaxant that also has uricosuric activity.<sup>1</sup> It is metabolized by an array of cytochrome P450 (CYP450) isoforms. As a result, recovery time from zoxazolamine-induced paralysis is used as a measure for change in CYP450 expression in mice.<sup>2,3</sup> Zoxazolamine also dose-dependently modulates the expression of pigmentation factors in a keratinocyte-melanocyte co-culture system.<sup>4</sup>

### References

1. Montgomery, D.B. and Ogryzlo, M.A. Comparison of the uricosuric effect of sulfinpyrazone (anturan) and zoxazolamine (flexin). *Can. Med. Assoc. J.* **83**, 885-888 (1960).
2. Hernandez, J.P., Mota, L.C., Huang, W., et al. Sexually dimorphic regulation and induction of P450s by the constitutive androstane receptor (CAR). *Toxicology* **256(1-2)**, 53-64 (2009).
3. Chen, W.-D., Fu, X., Dong, B., et al. Neonatal activation of the nuclear receptor CAR results in epigenetic memory and permanent change of drug metabolism in mouse liver. *Hepatology* **56(4)**, 1499-1509 (2012).
4. Lee, J.H., Chen, H., Kolev, V., et al. High-throughput, high-content screening for novel pigmentation regulators using a keratinocyte/melanocyte co-culture system. *Exp. Dermatol.* **23(2)**, 125-129 (2014).

#### 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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