

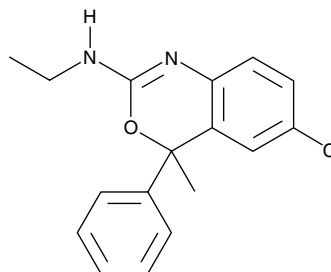
# Product Information



## Etifoxine

Item No. 15999

**CAS Registry No.:** 21715-46-8  
**Formal Name:** 6-chloro-N-ethyl-4-methyl-4-phenyl-4H-3, 1-benzoxazin-2-amine  
**Synonyms:** Etafenoxine, HOE 36-801, Stresam  
**MF:** C<sub>17</sub>H<sub>17</sub>ClN<sub>2</sub>O  
**FW:** 300.8  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 275 nm



### Laboratory Procedures

For long term storage, we suggest that etifoxine be stored as supplied at -20°C. It should be stable for at least two years.

Etifoxine is supplied as a crystalline solid. A stock solution may be made by dissolving the etifoxine in the solvent of choice. Etifoxine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of etifoxine in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

Etifoxine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, etifoxine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Etifoxine has a solubility of approximately 0.1 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Etifoxine is a positive allosteric modulator of GABA<sub>A</sub> receptors that produces anxiolytic effects by preferentially modulating GABA<sub>A</sub> receptors containing β<sub>2</sub> or β<sub>3</sub> subunits (EC<sub>50</sub>s = 7.5 μM) over those bearing a β<sub>1</sub> subunit (EC<sub>50</sub> > 20 μM).<sup>1</sup> It has also been identified as a ligand of the translocator protein, reportedly reducing inflammatory macrophage activation after peripheral nerve injury (20 μM) and promoting conditions favorable for axon regrowth.<sup>2</sup>

### References

1. Hamon, A., Morel, A., Hue, B., *et al.* The modulatory effects of the anxiolytic etifoxine on GABA<sub>A</sub> receptors are mediated by the β subunit. *Neuropharmacology* **45(3)**, 293-303 (2003).
2. Girard, C., Liu, S., Cadepond, F., *et al.* Etifoxine improves peripheral nerve regeneration and functional recovery. *Proc. Natl. Acad. Sci. USA* **105(51)**, 20505-20510 (2008).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/15999](http://www.caymanchem.com/catalog/15999)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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