

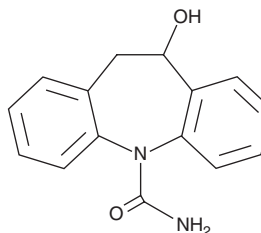
# PRODUCT INFORMATION



## 10,11-dihydro-10-hydroxy Carbamazepine

Item No. 18467

**CAS Registry No.:** 29331-92-8  
**Formal Name:** 10,11-dihydro-10-hydroxy-5H-dibenz[b,f]azepine-5-carboxamide  
**Synonyms:** BIA 2-005, 10,11-dihydro-10-hydroxy CBZ, 10,11-hydroxy-10,11 Dihydrocarbamezer, GP 47779, Licarbazepine  
**MF:** C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 254.3  
**Purity:** ≥98%  
**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

10,11-dihydro-10-hydroxy Carbamazepine is supplied as a crystalline solid. A stock solution may be made by dissolving the 10,11-dihydro-10-hydroxy carbamazepine in the solvent of choice, which should be purged with an inert gas. 10,11-dihydro-10-hydroxy Carbamazepine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 10,11-dihydro-10-hydroxy carbamazepine in ethanol is approximately 3 mg/ml and approximately 25 mg/ml in DMSO and DMF.

10,11-dihydro-10-hydroxy Carbamazepine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 10,11-dihydro-10-hydroxy carbamazepine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 10,11-dihydro-10-hydroxy Carbamazepine 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

10,11-dihydro-10-hydroxy Carbamazepine is an antiepileptic agent and active metabolite of the prodrug oxcarbazepine (Item No. 17340).<sup>1</sup> It is a racemic mixture of (R)- and (S)-10,11-dihydro-10-hydroxy carbamazepine. (S)-10,11-dihydro-10-hydroxy Carbamazepine protects against seizures induced by maximal electroshock (MES) in rats by 42% while (R)-10,11-dihydro-10-hydroxy carbamazepine only protects against MES-induced seizures by 22.5%.

### Reference

1. Benes, J., Parada, A., Figueiredo, A.A., *et al.* Anticonvulsant and sodium channel-blocking properties of novel 10,11-dihydro-5H-dibenz[b,f]azepine-5-carboxamide derivatives. *J. Med. Chem.* **42**(14), 2582-2587 (1999).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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