

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: Oxcarbazepine Catalog No.: 3864 Batch No.: 1

CAS Number: 28721-07-5 EC Number: 249-188-8

IUPAC Name: 10,11-Dihydro-10-oxo-5*H*-dibenzo(*Z*)[*b*,*f*]azepine-5-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{12}N_2O_2$ Batch Molecular Weight: 252.27

Physical Appearance: Pale pink solid
Solubility: DMSO to 50 mM
Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen
Theoretical 71.42 4.79 11.1
Found 71.38 4.74 11.03



Product Information

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IUPAC Name: 10,11-Dihydro-10-oxo-5*H*-dibenzo(*Z*)[*b*,*f*]azepine-5-carboxamide

Description:

Anticonvulsant; protects mice and rats against generalized tonicclonic seizures induced by electroshock. Thought to act via inhibition of sodium channel activity.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₁₂N₂O₂ Batch Molecular Weight: 252.27 Physical Appearance: Pale pink solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Schmutz et al (1994) Oxcarbazepine: preclinical anticonvulsant profile and putative mechanism of action. Epilepsia **35** S47. PMID: 8039471.

Ambrosio *et al* (2002) Mechanism of action of carbamazepine and its derivatives, oxcarbazepine, BIA 2-093, and BIA 2-024. Neurochem.Res. **27** 121. PMID: 11926264.

Zheng *et al* (2009) Oxcarbazepine, not its active metabolite, potentiates GABA_A activation and aggravates absence seizures. Epilepsia *50* 83. PMID: 18717705.