



# **Certificate of Analysis**

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Product Name: Phaclofen Catalog No.: 0178 Batch No.: 9

CAS Number: 114012-12-3

IUPAC Name: (RS)-3-Amino-2-(4-chlorophenyl)propylphosphonic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_9H_{13}CINO_3P$ 

**Batch Molecular Weight:** 249.63 **Physical Appearance:** White solid

Solubility: 1eq. NaOH to 25 mM

Storage: Store at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.65$  (Pyridine:Acetic acid:Water:Butanol [3:8:11:22])

HPLC: Shows 97.8% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 43.3 5.25 5.61 Found 43.06 5.23 5.46



## **Product Information**

Print Date: Jan 8th 2016

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CAS Number: 114012-12-3

**IUPAC Name:** (RS)-3-Amino-2-(4-chlorophenyl)propylphosphonic acid

**Description:** 

Selective GABA<sub>B</sub> antagonist. Phosphono analog of GABA<sub>B</sub>

agonist baclofen (Cat. No. 0417).

**Physical and Chemical Properties:** Batch Molecular Formula: C<sub>9</sub>H<sub>13</sub>CINO<sub>3</sub>P

Batch Molecular Weight: 249.63 Physical Appearance: White solid

Minimum Purity: >97%

**Batch Molecular Structure:** 

Storage: Store at RT

Solubility & Usage Info:

1eq. NaOH to 25 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:

Kerr et al (1987) Phaclofen: a peripheral and central baclofen antagonist. Brain Res. 405 150. PMID: 3032346.

Hasuo and Gallagher (1988) Comparison of antagonism by phaclofen of baclofen induced hyperpolarization and synaptically mediated late hyperpolarizing potentials recorded intracellularly from rat dorsolateral septal neurons. Neurosci.Lett. 86 77. PMID: 3362432.

Karlsson et al (1988) Phaclofen: a GABA<sub>B</sub> blocker reduced long-duration inhibition in the neocortex. Eur.J.Pharmacol. 148 485. PMID: 2838310.