

## Certificate of Analysis

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**Product Name:** Pentoxifylline

CAS Number: 6493-05-6

IUPAC Name: 3,7-Dimethyl-1-(5-oxohexyl)xanthine

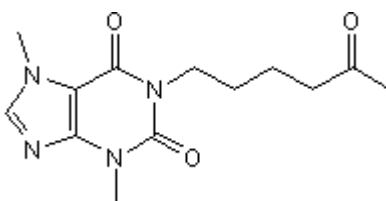
**Catalog No.:** 3056

**Batch No.:** 2

EC Number: 229-374-5

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>13</sub>H<sub>18</sub>N<sub>4</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 278.31  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	56.1	6.52	20.13
Found	56.44	6.58	20.01

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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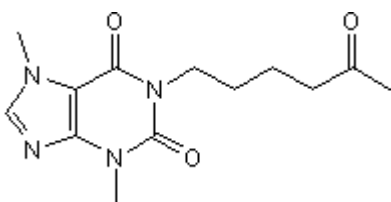
**Batch No.:** 2**Description:**

Phosphodiesterase inhibitor that blocks production of TNF- $\alpha$  and other cytokines. Displays antinociceptive activity.

**Physical and Chemical Properties:**Batch Molecular Formula: C<sub>13</sub>H<sub>18</sub>N<sub>4</sub>O<sub>3</sub>

Batch Molecular Weight: 278.31

Physical Appearance: White solid

**Minimum Purity:** >99%**Batch Molecular Structure:****Storage:** Store at RT**Solubility & Usage Info:**

water to 100 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:**

**Monshouwer et al** (1996) Differential effect of pentoxifylline on lipopolysaccharide-induced downregulation of cytochrome P450. *Biochem.Pharmacol.* **52** 1195. PMID: 8937426.

**Vale et al** (2004) Antihyperalgesic effect of pentoxifylline on experimental inflammatory pain. *Br.J.Pharmacol.* **143** 833. PMID: 15520047.

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