

# **Certificate of Analysis**

Print Date: Jan 15<sup>th</sup> 2016

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Product Name: Enoximone Catalog No.: 1693 Batch No.: 1

CAS Number: 77671-31-9

IUPAC Name: 1,3-Dihydro-4-methyl-5-[4-(methylthio)benzoyl]-2*H*-imidazol-2-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{12}H_{12}N_2O_2S$ 

Batch Molecular Weight: 248.3

Physical Appearance: White solid

Solubility: DMSO to 100 mM Storage: Store at +4°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 58.05 4.87 11.28 Found 57.93 4.88 11.17



# **Product Information**

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**IUPAC Name:** 1,3-Dihydro-4-methyl-5-[4-(methylthio)benzoyl]-2H-imidazol-2-one

## **Description:**

Inhibitor of type III phosphodiesterase (PDE3). Increases intracellular cyclic AMP (cAMP) concentrations and enhances myocardial contractility. Also induces concentration-dependent vasodilation in vitro.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>S Batch Molecular Weight: 248.3 Physical Appearance: White solid

Minimum Purity: >99%

#### **Batch Molecular Structure:**

Storage: Store at +4°C

### Solubility & Usage Info:

DMSO 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:

Vroom et al (1996) Effect of phosphodiesterase inhibitors on human arteries in vitro. Br.J.Anaesth. 76 122. PMID: 8672353.

Pacher and Stanek (1999) Ambulatory vasodilator therapy in heart failure: systematic review of the literature and personal observational experience. Eur.J.Heart Fail. 1 263. PMID: 10935673.

Jung et al (2005) Pharmacological effects of ATI22-107 [2-(2-{2-[2-chloro-4-(6-oxo-1,4,5,6-tetrahydro-pyridazin-3-yl)-phenoxy]acetylamino}-ethoxymethyl)-4-(2-chloro-phenyl)-6-methyl-1,4-dihydro-pyridine-3,5-dicarboxylic acid dimethyl ester)], a novel dual pharmacophore, on myocyte calcium cycling and contractility. J.Pharmacol.Exp.Ther. 312 517. PMID: 15550574.