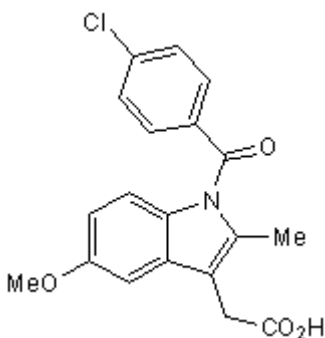


**Product Name:** Indomethacin  
**CAS Number:** 53-86-1  
**IUPAC Name:** 1-(4-Chlorobenzoyl)-5-methoxy-2-methyl-1*H*-indole

**Catalog No.:** 1708  
**Batch No.:** 1  
**EC Number:** 200-186-5

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>19</sub>H<sub>16</sub>ClNO<sub>4</sub>·¼H<sub>2</sub>O  
**Batch Molecular Weight:** 362.29  
**Physical Appearance:** White solid  
**Solubility:** ethanol to 50 mM with gentle warming  
DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.76 (Dichloromethane:Methanol [8:2])  
**Melting Point:** Between 166 - 170°C  
**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.78	4.51	3.91
Found	63.75	4.5	3.87

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

**Product Name:** Indomethacin

**Catalog No.:** 1708

**Batch No.:** 1

CAS Number: 53-86-1

EC Number: 200-186-5

IUPAC Name: 1-(4-Chlorobenzoyl)-5-methoxy-2-methyl-1*H*-indole

**Description:**

Cyclooxygenase (COX) inhibitor; displays selectivity for COX-1 (IC<sub>50</sub> values are 230 and 630 nM for human COX-1 and COX-2 respectively). Widely used anti-inflammatory agent.

**Physical and Chemical Properties:**

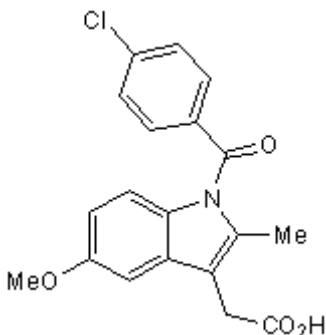
Batch Molecular Formula: C<sub>19</sub>H<sub>16</sub>ClNO<sub>4</sub>·¼H<sub>2</sub>O

Batch Molecular Weight: 362.29

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

ethanol to 50 mM with gentle warming

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:**

**Walters and Willoughby** (1965) Indomethacin, a new anti-inflammatory drug: its potential use as a laboratory tool. *J.Pathol.Bacteriol.* **90** 641. PMID: 5849618.

**Shen and Winter** (1977) Chemical and biological studies on indomethacin, sulindac and their analogs. *Adv Drug Res.* **12** 90. PMID: 343530.

**Palomer et al** (2002) Identification of novel cyclooxygenase-2 selective inhibitors using pharmacophore models. *J.Med.Chem.* **45** 1402. PMID: 11906281.

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

Tocris Bioscience is an R&D Systems company

USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373

[www.RnDSystems.com](http://www.RnDSystems.com)