**PRODUCT INFORMATION**

**Indomethacin**  
*Item No. 70270*

**CAS Registry No.:** 53-86-1  
**Formal Name:** 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-1H-indole-3-acetic acid  
**MF:** C₁₉H₁₆ClNO₄  
**FW:** 357.8  
**Purity:** ≥99%  
**Supplied as:** A crystalline solid  
**Storage:** Room temperature  
**Stability:** ≥4 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman’s Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

**Laboratory Procedures**

Indomethacin is supplied as a crystalline solid. A stock solution may be made by dissolving the indomethacin in the solvent of choice, which should be purged with an inert gas. Indomethacin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of indomethacin in these solvents is approximately 6.73, 17.8, and 20.2 mg/ml, respectively. Indomethacin is soluble in 0.1 M Na₂CO₃ (warmed) at a concentration of approximately 0.1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of indomethacin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of indomethacin in PBS (pH 7.2) is approximately 0.05 mg/ml. We do not recommend storing the aqueous solution for more than one day.

**Description**

Indomethacin is a non-selective COX inhibitor (IC₅₀ = 1.67 and 24.6 µM for human COX-1 and COX-2, respectively). It reduces filter paper-disc induced growth of granulation tissue, a marker of inflammation, in chick chorioallantoic membranes. Indomethacin reduces ocular inflammation induced by bovine serum in rabbits. It also reduces paw edema in a rat model of carrageenan-induced inflammation.

**References**