

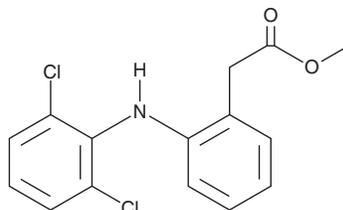
PRODUCT INFORMATION



Diclofenac methyl ester

Item No. 22218

CAS Registry No.: 15307-78-5
Formal Name: 2-[(2,6-dichlorophenyl)amino]-benzeneacetic acid, methyl ester
Synonym: Methanol Diclofenac ester
MF: C₁₅H₁₃Cl₂NO₂
FW: 310.2
Purity: ≥98%
UV/Vis.: λ_{max}: 276 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Diclofenac methyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the diclofenac methyl ester in the solvent of choice, which should be purged with an inert gas. Diclofenac methyl ester is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of diclofenac methyl ester in these solvents is approximately 5 and 10 mg/ml, respectively.

Diclofenac methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, diclofenac methyl ester should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Diclofenac methyl ester has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Diclofenac methyl ester is a hydrophobic prodrug form of the non-steroidal anti-inflammatory drug (NSAID) diclofenac (Item Nos. 70680 | 22983).¹ It is more soluble than diclofenac acid in isopropylmyristate. Diclofenac methyl ester does not permeate human epidermal membranes *in vitro*.

Reference

1. Lobo, S., Li, H., Farhan, N., *et al.* Evaluation of diclofenac prodrugs for enhancing transdermal delivery. *Drug Dev. Ind. Pharm.* **40**(3), 425-432 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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