

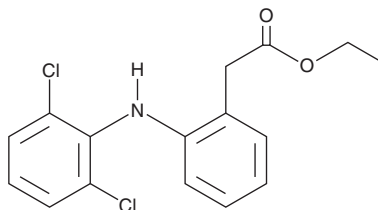
PRODUCT INFORMATION



Diclofenac ethyl ester

Item No. 22105

CAS Registry No.: 15307-77-4
Formal Name: 2-[(2,6-dichlorophenyl)amino]-benzeneacetic acid, ethyl ester
MF: C₁₆H₁₅Cl₂NO₂
FW: 324.2
Purity: ≥98%
UV/Vis.: λ_{max}: 229, 243, 281 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 ethyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the diclofenac ethyl ester in the solvent of choice, which should be purged with an inert gas. Diclofenac ethyl ester is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of diclofenac ethyl ester in these solvents is approximately 5 and 10 mg/ml.

Diclofenac ethyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, diclofenac ethyl ester should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Diclofenac ethyl 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 ethyl ester is an esterified form of the non-steroidal anti-inflammatory drug (NSAID) diclofenac (Item Nos. 22983 | 70680). It has been used as a precursor in the synthesis of diclofenac derivatives with anti-inflammatory and analgesic activity and decreased ulcerogenicity.^{1,2}

References

1. Amir, M., Akhter, W., and Somakala, K. Synthesis of furoxan derivatives of diclofenac as potent anti-inflammatory agents with reduced GI toxicity. *Indian J. Chem.* **55(B)**, 989-998 (2016).
2. Bhandari, S.V., Bothara, K.G., Raut, M.K., *et al.* Design, synthesis and evaluation of antiinflammatory, analgesic and ulcerogenicity studies of novel 5-substituted phenacyl-1,3,4-oxadiazole-2-thiol and Schiff bases of diclofenac acid as nonulcerogenic derivatives. *Bioorg. Med. Chem.* **16(4)**, 1822-1831 (2008).

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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