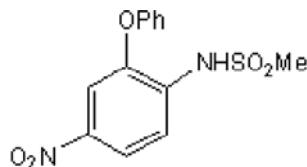


Certificate of Analysiswww.tocris.com**Product Name:** Nimesulide**Catalog No.:** 2470**Batch No.:** 1

CAS Number: 51803-78-2

EC Number: 257-431-4

IUPAC Name: *N*-(4-Nitro-2-phenoxyphenyl)methanesulfonamide**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₁₃H₁₂N₂O₅S**Batch Molecular Weight:** 308.31**Physical Appearance:** Yellow solid**Solubility:** DMSO to 100 mM
ethanol to 25 mM**Storage:** Store at +4°C**Batch Molecular Structure:****2. ANALYTICAL DATA****HPLC:** Shows >99.9% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 50.64 3.92 9.09

Found 50.62 3.88 8.99

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

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Product Information

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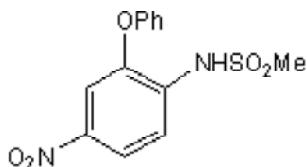
Description:

Selective, orally active cyclooxygenase-2 (COX-2) inhibitor. Produces potent analgesic, anti-inflammatory and antipyretic activities *in vivo*. Reported to produce fewer gastrointestinal side effects than standard NSAIDs. Also inhibits sodium-dependent neutral amino acid transporter B0AT1 (SLC6A19; IC₅₀ = 23 µM).

Physical and Chemical Properties:Batch Molecular Formula: C₁₃H₁₂N₂O₅S

Batch Molecular Weight: 308.31

Physical Appearance: Yellow solid

Minimum Purity: ≥99%**Batch Molecular Structure:****Storage:** Store at +4°C**Solubility & Usage Info:**DMSO to 100 mM
ethanol to 25 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:

Pochini et al (2014) Nimesulide binding site in the B0AT1 (SLC6A19) amino acid transporter. Mechanism of inhibition revealed by proteoliposome transport assay and molecular modelling. *Biochem.Pharmacol.* **89** 422. PMID: 24704252.

Cullen et al (1998) Selective cyclooxygenase-2 inhibition by nimesulide in man. *J.Pharmacol.Exp.Ther.* **287** 578. PMID: 9808683.

Famaey (1997) *In vitro* and *in vivo* pharmacological evidence of selective cyclooxygenase-2 inhibition by nimesulide: an overview. *Inflamm.Res.* **46** 437. PMID: 9427063.

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