



Formula: C₁₅H₁₃N₃O₄S

MW: 331.35

CAS: 36322-90-4

MDL NUMBER: MFCD00057317

IUPAC: (4-hydroxy-2-methyl-1,1-dioxobenzo[e]1,2-thiazin-3-yl)-N-(2-pyridyl)carboxamide

Smiles: c1ccc2c(c1)S(N(C(=O)O)C(=O)Nc1ncccc1)C(=O)O

ACCEPTORS: 4

DONORS: 2

ROTATION BONDS: 2

N+O: 7

Chiral Centers: 0

LogP: 0.73

LogS: -3.56

LIPINSKI: 4

Monograph Number: 0007589

Title: Piroxicam

CAS Registry Number: 36322-90-4

CAS Name: 4-Hydroxy-2-methyl-N-2-pyridinyl-2H-1,2-benzothiazine-3-carboxamide 1,1-dioxide

Additional Names:

3,4-dihydro-2-methyl-4-oxo-N-2-pyridyl-2H-1,2-benzothiazine-3-carboxamide 1,1-dioxide

Manufacturers' Codes: CP-16171

Trademarks: Artroxicom (Coli); Baxo (Toyama); Bruxicom (Bruschettini); Caliment (Apotex); Erazon (Krka); Feldene (Pfizer); Flogobene (Farge); Geldene (Pfizer); Improntal (Kabi); Larapam (Lagap); Pirkam (DAK); Piroflex (Lagap); Reudene (ABC); Riacen (Chiesi); Roxicom (Gramon); Roxiden (Pulitzer); Sasulen (Andreu); Solocalm (Microsules); Zunden (Luitpold)

Molecular Formula: C₁₅H₁₃N₃O₄S

Molecular Weight: 331.35.

Percent Composition: C 54.37%, H 3.95%, N 12.68%, O 19.31%, S 9.68%

Literature References: Non-steroidal anti-inflammatory with long half-life. Prepn (keto form): J. Lombardino, DE 1943265; idem, US 3591584 (1970, 1971 to Pfizer). Synthesis and biological properties: J. Lombardino, E. Wiseman, J. Med. Chem. 15, 848 (1972); J. Lombardino et al., ibid. 16, 493 (1973). Pharmacology: E. Wiseman et al., Arzneim.-Forsch. 26, 1300 (1976). Evaluation of ulcerogenic effects in comparison with droxicam, q.v.: G. Palacios et al., Methods Find. Exp. Clin. Pharmacol. 9, 353 (1987). Clinical pharmacology: L. Martinez et al., ibid. 10, 729 (1988). Review: eidem, in Pharmacological and Biochemical Properties of Drug Substances vol. 3, M. E. Goldberg, Ed. (Am. Pharm. Assoc., Washington, DC, 1981) pp 324-346. Review of pharmacology and therapeutic efficacy: R. N. Brogden et al., Drugs 22, 165-187 (1981); eidem, ibid. 28, 292-323 (1984). Symposium on clinical efficacy and safety: Am. J. Med. 81, Suppl. 5B, 1-55 (1986). Comprehensive description: M. Mihalic et al., Anal. Profiles Drug Subs. 15, 509-531 (1986).

Properties: Crystals from methanol, mp 198-200. pKa 6.3 (2:1 dioxane-water). LD50 orally in mice: 360 mg/kg (Wiseman).

Melting point: mp 198-200

pKa: pKa 6.3 (2:1 dioxane-water)

Toxicity data: LD50 orally in mice: 360 mg/kg (Wiseman)

Derivative Type: Cinnamic acid ester

CAS Registry Number: 87234-24-0

Additional Names: Piroxicam cinnamate; cinnoxycam

Manufacturers' Codes: SPA-S-510

Trademarks: Sinartrol (SPA); Zelis (Proter); Zen (Prophin)

Molecular Formula: C₂₄H₁₉N₃O₅S

Molecular Weight: 461.49.

Percent Composition: C 62.46%, H 4.15%, N 9.11%, O 17.33%, S 6.95%

Derivative Type: Compd with b-cyclodextrin

CAS Registry Number: 121696-62-6

Trademarks: Brexin (Chiesi); Cicladol (Master); Cycladol (Promedica)

Molecular Formula: C₅₇H₈₃N₃O₃₉S

Molecular Weight: 1466.33.

Percent Composition: C 46.69%, H 5.71%, N 2.87%, O 42.55%, S 2.19%

Therap-Cat: Anti-inflammatory.

