Piroxicam

Other names:	2H-1,2-Benzothiazine-3-carboxamide, 4-hydroxy-2-methyl-N-2-pyridinyl-, 1,1-dioxide
	2H-1,2-benzothiazine-3-carboxyamide-4-hydroxy-2-methyl-N-2-pyridinyl-1,1-dioxide
	4-Hydroxy-2-methyl-N-(2-pyridyl)-2H-1,2-benzothiazin-3-caboxyamid-1,1-dioxid (piroxicam)
	4-Hydroxy-2-methyl-N-(2-pyridyl)-2H-1,2-benzothiazine-3-carboxamide-1,1-dioxide
	4-Hydroxy-2-methyl-N-2-pyridinyl-2H-1,2-benzothiazine-3-carboxamide1,1-dioxide
	4-hydroxy-2-methyl-N-2-pyridinyl-2H-1,2-benzothiazine-3-carboxamide 1,1-dioxide
	Artroxicam
	Baxo
	Bruxicam
	CHF 1251
	CP 16171
	Caliment
	Erazon
	Feldene
	Flogobene
	Geldene
	Improntal
	Larapam
	NSC 666076
	Pirkam
	Piroflex
	Piroftal
	Pyroxycam
	Reudene
	Riacen
	Roxicam
	Roxiden
	Sasulen
	Solocalm
	Zunden
	dolonex
Inchi:	InChI=1S/C15H13N3O4S/c1-18-13(15(20)17-12-8-4-5-9-16-12)14(19)10-6-2-3-7-11(10)2
InchiKey:	QYSPLQLAKJAUJT-UHFFFAOYSA-N
Formula:	C15H13N3O4S
SMILES:	CN1C(C(=O)Nc2ccccn2)=C(O)c2ccccc2S1(=O)=O
Mol. weight [g/mol]:	331.35
CAS:	36322-90-4

Physical Properties

Property code	Value	Unit	Source
log10ws	-4.16		Estimated Solubility Method
logp	1.581		Crippen Method
mcvol	225.000	ml/mol	McGowan Method
rinpol	1413.00		NIST Webbook
rinpol	1413.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	35.00	kJ/mol	473.90	NIST Webbook
hfust	36.30	kJ/mol	473.40	NIST Webbook
hfust	34.50	kJ/mol	473.00	NIST Webbook
hfust	35.00	kJ/mol	474.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C36322904&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Measurement and modeling of mefenamic acid solubility in supercritical carbon dioxide: https://www.doi.org/10.1016/j.fluid.2011.09.031

Thermo-physical properties of l-Alanine/l-Valine in aqueous solutions of non-steroidal anti-inflammatory drug at different temperatures: https://www.doi.org/10.1016/j.jct.2018.03.022

Solubility Measurement of Diclofenac Acid in the Supercritical CO2 Cosolvent at different temperatures: https://www.doi.org/10.1021/je200012x

Estimated Solubility Method: http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

Volumetric and acoustic approach:

Legend

hfust: Enthalpy of fusion at a given temperature

log10ws: Log10 of Water solubility in mol/l

logp: Octanol/Water partition coefficient

mcvol: McGowan's characteristic volume

rinpol: Non-polar retention indices