Chloropropamide

Other names:

1-(4-Chlorobenzenesulfonyl)-3-propylurea
1-(p-Chlorobenzenesulfonyl)-3-propylurea
1-(p-Chlorophenylsulfonyl)-3-propylurea
1-Propyl-3-(p-chlorobenzenesulfonyl)urea
1-p-Chlorophenyl-3-(propylsulfonyl)urea
4-Chloro-4-((propylamino)carbonyl)benzenesulfonamide
4-Chloro-N-[(propylamino)-carbonyl]benzenesulfonamide
Adiaben
Asucrol
Benzenesulfonamide, 4-chloro-N-[(propylamino)carbonyl]-
Catanil
Chlorodiabina
Chloronase
Chlorpropamid
Clorpropamide
Diabaril
Diabechlor
Diabenal
Diabenese
Diabeneza
Diabet-pages
Diabetoral
Diabinese
Diamel Ex
Dynalase
Glisema
Insulase
Meldian
Melitase
Mellinese
Millinese
N-(4-Chlorophenylsulfonyl)-N'-propylurea
N-(p-Chlorobenzenesulfonyl)-N'-propylurea
N-Propyl-N'-(p-chlorobenzenesulfonyl)urea
N-Propyl-N'-p-chlorophenylsulfonylcarbamide
NCI-C01752
NSC 44634
Oradian
P-607
Stabinol

	Urea, 1-[(p-chlorophenyl)sulfonyl]-3-propyl-
	Urea, 1-propyl-3-(p-chloro-benzenesulfonyl)-
	chlorpropamide
Inchi:	InChI=1S/C10H13ClN2O3S/c1-2-7-12-10(14)13-17(15,16)9-5-3-8(11)4-6-9/h3-6H,2,7H2,
InchiKey:	RKWGIWYCVPQPMF-UHFFFAOYSA-N
Formula:	C10H13ClN2O3S
SMILES:	CCCNC(=O)NS(=O)(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]:	276.74
CAS:	94-20-2

Physical Properties

Property code	Value	Unit	Source
gf	-294.51	kJ/mol	Joback Method
hf	-499.40	kJ/mol	Joback Method
hfus	42.68	kJ/mol	Joback Method
hvap	83.43	kJ/mol	Joback Method
log10ws	-3.41		Aqueous Solubility Prediction Method
logp	1.738		Crippen Method
mcvol	189.860	ml/mol	McGowan Method
pc	3650.93	kPa	Joback Method
rinpol	1717.00		NIST Webbook
rinpol	1720.00		NIST Webbook
rinpol	1717.00		NIST Webbook
rinpol	1720.00		NIST Webbook
tb	699.28	K	Joback Method
tc	910.67	K	Joback Method
tf	465.13	K	Joback Method
vc	0.739	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	480.19	J/mol×K	699.28	Joback Method
cpg	492.17	J/mol×K	734.51	Joback Method
cpg	503.23	J/mol×K	769.74	Joback Method
cpg	513.38	J/mol×K	804.97	Joback Method

cpg	522.64	J/mol×K	840.20	Joback Method
cpg	531.03	J/mol×K	875.44	Joback Method
cpg	538.57	J/mol×K	910.67	Joback Method
hfust	25.70	kJ/mol	401.00	NIST Webbook

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C94202&Units=SI

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

Joback Method: https://en.wikipedia.org/wiki/Joback_method

Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

Legend

cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hfust: Enthalpy of fusion at a given temperature
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume