Dichlorphenamide tetra-methyl derivative

Other names: Dichlorphenamide, tetramethyl deriv.
Dichlorphenamide, tetramethyl
Diclofenamide, tetramethyl derivative
Inchi: InChI=1S/C10H14Cl2N2O4S2/c1-13(2)19(15,16)7-5-8(11)10(12)9(6-7)20(17,18)14(3)4/h
InchiKey: NJXHBEXVYIBIEK-UHFFFAOYSA-N
Formula: C10H14Cl2N2O4S2
SMILES: CN(C)S(=O)(=O)c1cc(Cl)c(Cl)c(S(=O)(=O)N(C)C)c1
Mol. weight [g/mol]: 361.26

Physical Properties

Property code	Value	Unit	Source
gf	-622.54	kJ/mol	Joback Method
hf	-850.73	kJ/mol	Joback Method
hfus	51.72	kJ/mol	Joback Method
hvap	92.24	kJ/mol	Joback Method
log10ws	-2.19		Crippen Method
logp	1.494		Crippen Method
mcvol	228.620	ml/mol	McGowan Method
pc	3628.97	kPa	Joback Method
tb	665.12	K	Joback Method
tc	863.96	K	Joback Method
tf	468.34	K	Joback Method
vc	0.874	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	548.22	J/mol×K	665.12	Joback Method
cpg	561.43	J/mol×K	698.26	Joback Method
cpg	573.69	J/mol×K	731.40	Joback Method
cpg	585.00	J/mol×K	764.54	Joback Method
cpg	595.38	J/mol×K	797.68	Joback Method
cpg	604.82	J/mol×K	830.82	Joback Method
cpg	613.33	J/mol×K	863.96	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U137191&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume