Aniline, n,n-dimethyl-p-(p-chlorophenylsulfonamido)-

Inchi: InChI=1S/C14H15ClN2O2S/c1-17(2)13-7-5-12(6-8-13)16-20(18,19)14-9-3-11(15)4-10-14

InchiKey: ZLJHQRVXIBTWHU-UHFFFAOYSA-N

Formula: C14H15ClN2O2S

SMILES: CN(C)c1ccc(NS(=O)(=O)c2ccc(Cl)cc2)cc1

Mol. weight [g/mol]: 310.80

CAS: 19770-72-0

Physical Properties

Property code	Value	Unit	Source
gf	-7.74	kJ/mol	Joback Method
hf	-230.26	kJ/mol	Joback Method
hfus	43.01	kJ/mol	Joback Method
hvap	84.13	kJ/mol	Joback Method
log10ws	-3.57		Crippen Method
logp	3.207		Crippen Method
mcvol	220.890	ml/mol	McGowan Method
pc	3082.99	kPa	Joback Method
tb	730.86	K	Joback Method
tc	959.13	K	Joback Method
tf	479.03	K	Joback Method
vc	0.832	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	574.39	J/mol×K	730.86	Joback Method
cpg	588.78	J/mol×K	768.90	Joback Method
cpg	601.91	J/mol×K	806.95	Joback Method
cpg	613.82	J/mol×K	844.99	Joback Method
cpg	624.58	J/mol×K	883.04	Joback Method
cpg	634.22	J/mol×K	921.08	Joback Method
cpg	642.80	J/mol×K	959.13	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19770720&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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