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

Inchi: InChI=1S/C16H19ClN2O2S/c1-3-19(4-2)15-9-7-14(8-10-15)18-22(20,21)16-11-5-13(17)6

InchiKey: MXSGYWQYRMCCTM-UHFFFAOYSA-N

Formula: C16H19ClN2O2S

SMILES: CCN(CC)c1ccc(NS(=O)(=O)c2ccc(Cl)cc2)cc1

Mol. weight [g/mol]: 338.85

CAS: 19770-77-5

Physical Properties

Property code	Value	Unit	Source
gf	9.10	kJ/mol	Joback Method
hf	-271.54	kJ/mol	Joback Method
hfus	48.20	kJ/mol	Joback Method
hvap	88.58	kJ/mol	Joback Method
log10ws	-4.41		Crippen Method
logp	3.987		Crippen Method
mcvol	249.070	ml/mol	McGowan Method
pc	2517.59	kPa	Joback Method
tb	776.62	K	Joback Method
tc	997.88	K	Joback Method
tf	501.57	K	Joback Method
vc	0.944	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	682.81	J/mol×K	776.62	Joback Method
cpg	697.60	J/mol×K	813.50	Joback Method
cpg	711.12	J/mol×K	850.37	Joback Method
cpg	723.43	J/mol×K	887.25	Joback Method
cpg	734.57	J/mol×K	924.12	Joback Method
cpg	744.61	J/mol×K	961.00	Joback Method
cpg	753.59	J/mol×K	997.88	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19770775&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

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