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

Inchi: InChI=1S/C15H18N2O2S/c1-12-4-10-15(11-5-12)20(18,19)16-13-6-8-14(9-7-13)17(2)3/h
InchiKey: ZBAWXYZNUKKOKU-UHFFFAOYSA-N
Formula: C15H18N2O2S
SMILES: Cc1ccc(S(=O)(=O)Nc2ccc(N(C)C)cc2)cc1
Mol. weight [g/mol]: 290.38
CAS: 19766-55-3

Physical Properties

Property code	Value	Unit	Source
gf	12.61	kJ/mol	Joback Method
hf	-235.16	kJ/mol	Joback Method
hfus	41.41	kJ/mol	Joback Method
hvap	81.97	kJ/mol	Joback Method
log10ws	-3.36		Crippen Method
logp	2.862		Crippen Method
mcvol	222.740	ml/mol	McGowan Method
pc	2890.51	kPa	Joback Method
tb	716.31	K	Joback Method
tc	937.98	K	Joback Method
tf	460.38	K	Joback Method
vc	0.839	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	601.56	J/mol×K	716.31	Joback Method
cpg	617.62	J/mol×K	753.25	Joback Method
cpg	632.39	J/mol×K	790.20	Joback Method
cpg	645.93	J/mol×K	827.14	Joback Method
cpg	658.28	J/mol×K	864.09	Joback Method
cpg	669.48	J/mol×K	901.03	Joback Method
cpg	679.58	J/mol×K	937.98	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=C19766553&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