2-Aminoacetanilide

Other names: Acetamide, N-(2-aminophenyl)-
Inchi: InChI=1S/C8H10N2O/c1-6(11)10-8-5-3-2-4-7(8)9/h2-5H,9H2,1H3,(H,10,11)
InchiKey: MPXAYYWSDIKNTP-UHFFFAOYSA-N
Formula: C8H10N2O
SMILES: CC(=O)Nc1ccccc1N
Mol. weight [g/mol]: 150.18
CAS: 34801-09-7

Physical Properties

Property code	Value	Unit	Source
gf	146.18	kJ/mol	Joback Method
hf	-8.71	kJ/mol	Joback Method
hfus	22.02	kJ/mol	Joback Method
hvap	60.16	kJ/mol	Joback Method
ie	7.39 ± 0.02	eV	NIST Webbook
log10ws	-1.31		Crippen Method
logp	1.227		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	4233.04	kPa	Joback Method
tb	590.67	K	Joback Method
tc	823.28	K	Joback Method
tf	404.71	K	Joback Method
vc	0.446	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.50	J/mol×K	590.67	Joback Method
cpg	297.98	J/mol×K	629.44	Joback Method
cpg	308.67	J/mol×K	668.21	Joback Method
cpg	318.60	J/mol×K	706.98	Joback Method
cpg	327.79	J/mol×K	745.75	Joback Method
cpg	336.28	J/mol×K	784.52	Joback Method
cpg	344.12	J/mol×K	823.28	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C34801097&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
ie:	Ionization energy
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