Acetamide, 2-(n-methylanilino)-

Inchi: InChI=1S/C9H12N2O/c1-11(7-9(10)12)8-5-3-2-4-6-8/h2-6H,7H2,1H3,(H2,10,12)
InchiKey: KOLJBMDKZNAERJ-UHFFFAOYSA-N
Formula: C9H12N2O
SMILES: CN(CC(N)=O)c1ccccc1
Mol. weight [g/mol]: 164.20
CAS: 21911-76-2

Physical Properties

Property code	Value	Unit	Source
gf	185.62	kJ/mol	Joback Method
hf	-3.82	kJ/mol	Joback Method
hfus	22.92	kJ/mol	Joback Method
hvap	57.33	kJ/mol	Joback Method
log10ws	-1.01		Crippen Method
logp	0.608		Crippen Method
mcvol	135.440	ml/mol	McGowan Method
pc	3749.97	kPa	Joback Method
tb	570.84	K	Joback Method
tc	795.51	K	Joback Method
tf	383.27	K	Joback Method
vc	0.484	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	322.46	J/mol×K	570.84	Joback Method
cpg	335.85	J/mol×K	608.28	Joback Method
cpg	348.28	J/mol×K	645.73	Joback Method
cpg	359.80	J/mol×K	683.17	Joback Method
cpg	370.47	J/mol×K	720.62	Joback Method
cpg	380.34	J/mol×K	758.06	Joback Method
cpg	389.45	J/mol×K	795.51	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C21911762&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