4-Methylformanilide

Other names:	p-Formotoluidide
	N-Formyl-p-toluidine
	Formamide, N-(4-methylphenyl)-
	4'-methylformanilide
Inchi:	InChI=1S/C8H9NO/c1-7-2-4-8(5-3-7)9-6-10/h2-6H,1H3,(H,9,10)
InchiKey:	GRVKDWHXLFEVBP-UHFFFAOYSA-N
Formula:	C8H9NO
SMILES:	Cc1ccc(NC=O)cc1
Mol. weight [g/mol]:	135.16
CAS:	3085-54-9

Physical Properties

Property code	Value	Unit	Source
gf	109.13	kJ/mol	Joback Method
hf	-15.50	kJ/mol	Joback Method
hfus	17.52	kJ/mol	Joback Method
hvap	49.50	kJ/mol	Joback Method
log10ws	-1.73		Crippen Method
logp	1.563		Crippen Method
mcvol	111.370	ml/mol	McGowan Method
pc	3990.60	kPa	Joback Method
tb	512.93	K	Joback Method
tc	731.21	K	Joback Method
tf	313.52	K	Joback Method
vc	0.427	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	235.80	J/mol×K	512.93	Joback Method
cpg	247.14	J/mol×K	549.31	Joback Method
cpg	257.78	J/mol×K	585.69	Joback Method
cpg	267.75	J/mol×K	622.07	Joback Method
cpg	277.08	J/mol×K	658.45	Joback Method

cpg	285.79	J/mol×K	694.83	Joback Method
cpg	293.90	J/mol×K	731.21	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3085549&Units=SI

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