2-Fluoro-4-methylaniline

Other names: p-Toluidine, 2-fluoro-
Benzenamine, 2-fluoro-4-methyl-
2-Fluoro-p-toluidine
4-Amino-3-fluorotoluene
Inchi: InChI=1S/C7H8FN/c1-5-2-3-7(9)6(8)4-5/h2-4H,9H2,1H3
InchiKey: ZQEXBVHABAJPHJ-UHFFFAOYSA-N
Formula: C7H8FN
SMILES: Cc1ccc(N)c(F)c1
Mol. weight [g/mol]: 125.14
CAS: 452-80-2

Physical Properties

Property code	Value	Unit	Source
gf	-27.15	kJ/mol	Joback Method
hf	-136.54	kJ/mol	Joback Method
hfus	15.43	kJ/mol	Joback Method
hvap	56.60 ± 0.60	kJ/mol	NIST Webbook
log10ws	-1.91		Crippen Method
logp	1.716		Crippen Method
mcvol	97.480	ml/mol	McGowan Method
pc	4021.02	kPa	Joback Method
tb	468.00	K	Joback Method
tc	685.00	K	Joback Method
tf	303.96	K	Joback Method
vc	0.366	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	196.53	J/mol×K	468.00	Joback Method
cpg	206.84	J/mol×K	504.17	Joback Method
cpg	216.58	J/mol×K	540.33	Joback Method
cpg	225.78	J/mol×K	576.50	Joback Method
cpg	234.45	J/mol×K	612.66	Joback Method

cpg	242.60	J/mol×K	648.83	Joback Method
cpg	250.26	J/mol×K	685.00	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C452802&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