Benzoic acid, 2-amino-4-methyl-

Other names: p-Toluic acid, 2-amino-
4-methylanthranilic acid
Inchi: InChI=1S/C8H9NO2/c1-5-2-3-6(8(10)11)7(9)4-5/h2-4H,9H2,1H3,(H,10,11)
InchiKey: RPGKFFKUTVJVPY-UHFFFAOYSA-N
Formula: C8H9NO2
SMILES: Cc1ccc(C(=O)O)c(N)c1
Mol. weight [g/mol]: 151.16
CAS: 2305-36-4

Physical Properties

Property code	Value	Unit	Source
gf	-89.66	kJ/mol	Joback Method
hf	-225.88	kJ/mol	Joback Method
hfus	20.62	kJ/mol	Joback Method
hvap	71.07	kJ/mol	Joback Method
log10ws	-1.64		Crippen Method
logp	1.275		Crippen Method
mcvol	117.240	ml/mol	McGowan Method
pc	4608.87	kPa	Joback Method
rinpol	949.00		NIST Webbook
rinpol	949.00		NIST Webbook
tb	637.66	K	Joback Method
tc	853.80	K	Joback Method
tf	425.39	K	Joback Method
vc	0.429	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.29	J/mol×K	637.66	Joback Method
cpg	293.26	J/mol×K	673.68	Joback Method
cpg	301.67	J/mol×K	709.71	Joback Method
cpg	309.53	J/mol×K	745.73	Joback Method
cpg	316.86	J/mol×K	781.76	Joback Method

cpg	323.68	J/mol×K	817.78	Joback Method
cpg	330.01	J/mol×K	853.80	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=C2305364&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume