N,N,2,6-Tetramethyl-4-nitroaniline

Inchi: InChI=1S/C10H14N2O2/c1-7-5-9(12(13)14)6-8(2)10(7)11(3)4/h5-6H,1-4H3
InchiKey: CCELYGJVZZYHES-UHFFFAOYSA-N
Formula: C10H14N2O2
SMILES: Cc1cc([N+](=O)[O-])cc(C)c1N(C)C
Mol. weight [g/mol]: 194.23
CAS: 24558-36-9

Physical Properties

Property code	Value	Unit	Source
affp	918.40	kJ/mol	NIST Webbook
basg	886.00	kJ/mol	NIST Webbook
gf	263.17	kJ/mol	Joback Method
hf	9.16	kJ/mol	Joback Method
hfus	28.91	kJ/mol	Joback Method
hvap	60.75	kJ/mol	Joback Method
log10ws	-2.98		Crippen Method
logp	2.278		Crippen Method
mcvol	155.400	ml/mol	McGowan Method
pc	2823.32	kPa	Joback Method
tb	634.10	K	Joback Method
tc	866.73	K	Joback Method
tf	442.52	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	392.68	J/mol×K	634.10	Joback Method
cpg	406.67	J/mol×K	672.87	Joback Method
cpg	419.73	J/mol×K	711.64	Joback Method
cpg	431.90	J/mol×K	750.41	Joback Method
cpg	443.24	J/mol×K	789.19	Joback Method
cpg	453.77	J/mol×K	827.96	Joback Method
cpg	463.53	J/mol×K	866.73	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=C24558369&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

affp:	Proton affinity
basg:	Gas basicity
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