N,N-Diethyl-p-nitroaniline

Other names:	p-Nitro-N,N-diethylaniline
	Benzenamine, N,N-diethyl-4-nitro-
	N,N-Diethyl-4-nitroaniline
	Diethyl-(4-nitrophenyl)amine
Inchi:	InChI=1S/C10H14N2O2/c1-3-11(4-2)9-5-7-10(8-6-9)12(13)14/h5-8H,3-4H2,1-2H3
InchiKey:	CFPIZMWTMRWZRO-UHFFFAOYSA-N
Formula:	C10H14N2O2
SMILES:	CCN(CC)c1ccc([N+](=O)[O-])cc1
Mol. weight [g/mol]:	194.23
CAS:	2216-15-1

Physical Properties

Property code	Value	Unit	Source
gf	282.43	kJ/mol	Joback Method
hf	32.10	kJ/mol	Joback Method
hfus	29.69	kJ/mol	Joback Method
hvap	59.43	kJ/mol	Joback Method
log10ws	-2.87		Crippen Method
logp	2.441		Crippen Method
mcvol	155.400	ml/mol	McGowan Method
pc	2915.53	kPa	Joback Method
tb	624.14	K	Joback Method
tc	854.90	K	Joback Method
tf	417.48	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	394.46	J/mol×K	624.14	Joback Method
cpg	408.90	J/mol×K	662.60	Joback Method
cpg	422.31	J/mol×K	701.06	Joback Method
cpg	434.76	J/mol×K	739.52	Joback Method
cpg	446.29	J/mol×K	777.98	Joback Method

cpg	456.97	J/mol×K	816.44	Joback Method
cpg	466.85	J/mol×K	854.90	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2216151&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