1,2-Ethanediamine, N'-(2-aminoethyl)-N,N-diethyl-

Other names: 1,1-Diethyldiethylenetriamine
N,N-Diethyldiethylenetriamine
Diethylenetriamine, 1,1-diethyl-
N'-(2-aminoethyl)-N,N-diethylethylenediamine

Inchi: InChI=1S/C8H21N3/c1-3-11(4-2)8-7-10-6-5-9/h10H,3-9H2,1-2H3

InchiKey: CEFDTSBDWYXVHY-UHFFFAOYSA-N

Formula: C8H21N3

SMILES: CCN(CC)CCNCCN

Mol. weight [g/mol]: 159.27

CAS: 24426-16-2

Physical Properties

Property code	Value	Unit	Source
gf	283.10	kJ/mol	Joback Method
hf	-53.66	kJ/mol	Joback Method
hfus	29.79	kJ/mol	Joback Method
hvap	52.52	kJ/mol	Joback Method
log10ws	-0.36		Crippen Method
logp	-0.123		Crippen Method
mcvol	153.520	ml/mol	McGowan Method
pc	2718.33	kPa	Joback Method
tb	517.58	K	Joback Method
tc	695.86	K	Joback Method
tf	348.31	K	Joback Method
vc	0.566	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.95	J/mol×K	517.58	Joback Method
cpg	390.56	J/mol×K	547.29	Joback Method
cpg	404.49	J/mol×K	577.01	Joback Method
cpg	417.76	J/mol×K	606.72	Joback Method
cpg	430.41	J/mol×K	636.43	Joback Method

cpg	442.46	J/mol×K	666.15	Joback Method
cpg	453.92	J/mol×K	695.86	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C24426162&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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