1,2-Ethanediamine, N-ethyl-N'-methyl-

Other names: Ethylenediamine, N-ethyl-N'-methyl-
N-Ethyl-N'-methylethylenediamine
2,5-Diazaheptane
ethyl(2-(methylamino)ethyl)amine
Inchi: InChI=1S/C5H14N2/c1-3-7-5-4-6-2/h6-7H,3-5H2,1-2H3
InchiKey: MXJYVLYENVWKQX-UHFFFAOYSA-N
Formula: C5H14N2
SMILES: CCNCCNC
Mol. weight [g/mol]: 102.18
CAS: 111-37-5

Physical Properties

Property code	Value	Unit	Source
gf	170.00	kJ/mol	Joback Method
hf	-39.59	kJ/mol	Joback Method
hfus	18.90	kJ/mol	Joback Method
hvap	39.60	kJ/mol	Joback Method
log10ws	-0.29		Crippen Method
logp	-0.185		Crippen Method
mcvol	101.270	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
tb	414.14	K	Joback Method
tc	589.81	K	Joback Method
tf	251.43	K	Joback Method
vc	0.386	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	203.03	J/mol×K	414.14	Joback Method
cpg	213.96	J/mol×K	443.42	Joback Method
cpg	224.45	J/mol×K	472.70	Joback Method
cpg	234.52	J/mol×K	501.98	Joback Method
cpg	244.18	J/mol×K	531.25	Joback Method

cpg	253.44	J/mol×K	560.53	Joback Method
cpg	262.30	J/mol×K	589.81	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C111375&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