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

Other names:	2-(Diethylamino)-N-methylethylamine
	Ethylenediamine, N,N-diethyl-N'-methyl-
	N,N-Diethyl-N'-methylenediamine
	N,N-Diethyl-N'-methylethylenediamine
	[2-(Diethylamino)ethyl]methylamine
	diethyl(2-methylaminoethyl)amine
Inchi:	InChI=1S/C7H18N2/c1-4-9(5-2)7-6-8-3/h8H,4-7H2,1-3H3
InchiKey:	MKDYQLJYEBWUIG-UHFFFAOYSA-N
Formula:	C7H18N2
SMILES:	CCN(CC)CCNC
Mol. weight [g/mol]:	130.23
CAS:	104-79-0

Physical Properties

Property code	Value	Unit	Source
gf	208.23	kJ/mol	Joback Method
hf	-66.81	kJ/mol	Joback Method
hfus	22.01	kJ/mol	Joback Method
hvap	39.66	kJ/mol	Joback Method
log10ws	-0.51		Crippen Method
logp	0.548		Crippen Method
mcvol	129.450	ml/mol	McGowan Method
pc	2832.35	kPa	Joback Method
tb	431.70	K	NIST Webbook
tc	589.99	K	Joback Method
tf	253.78	K	Joback Method
vc	0.480	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.14	J/mol×K	422.17	Joback Method
cpg	281.72	J/mol×K	450.14	Joback Method
cpg	294.74	J/mol×K	478.11	Joback Method

cpg	307.22	J/mol×K	506.08	Joback Method
cpg	319.17	J/mol×K	534.05	Joback Method
cpg	330.62	J/mol×K	562.02	Joback Method
cpg	341.57	J/mol×K	589.99	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.56618e+01
Coeff. B	-4.09217e+03
Coeff. C	-6.11490e+01
Temperature range (K), min.	302.05
Temperature range (K), max.	456.52

Sources

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=C104790&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume