Ethanamine, N-methyl-

Other names:	(CH3)(C2H5)NH
	Ethylamine, N-methyl-
	Ethylmethylamine
	Methylaminoethane
	Methylethylamine
	N-Ethyl-N-methylamine
	N-Methyl-N-ethylamine
	N-Methylethanamine
	N-Methylethylamine
Inchi:	InChI=1S/C3H9N/c1-3-4-2/h4H,3H2,1-2H3
InchiKey:	LIWAQLJGPBVORC-UHFFFAOYSA-N
Formula:	C3H9N
SMILES:	CCNC
Mol. weight [g/mol]:	59.11
CAS:	624-78-2

Physical Properties

Property code	Value	Unit	Source
affp	942.20	kJ/mol	NIST Webbook
basg	909.20	kJ/mol	NIST Webbook
gf	63.77	kJ/mol	Joback Method
hf	-51.78	kJ/mol	Joback Method
hfus	8.62	kJ/mol	Joback Method
hvap	28.71	kJ/mol	Joback Method
ie	8.15	eV	NIST Webbook
log10ws	-0.27		Crippen Method
logp	0.226		Crippen Method
mcvol	63.110	ml/mol	McGowan Method
pc	4486.22	kPa	Joback Method
rinpol	492.00		NIST Webbook
rinpol	482.00		NIST Webbook
rinpol	492.00		NIST Webbook
rinpol	482.00		NIST Webbook
tb	308.15 ± 2.00	K	NIST Webbook
tb	308.15 ± 3.00	K	NIST Webbook
tb	309.65 ± 2.00	K	NIST Webbook
tb	308.15 ± 2.00	K	NIST Webbook

tb	308.15 ± 1.50	K	NIST Webbook
tb	309.90	K	NIST Webbook
tc	488.01	K	Joback Method
tf	176.23	K	Joback Method
vc	0.238	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	97.20	J/mol×K	318.21	Joback Method
cpg	104.32	J/mol×K	346.51	Joback Method
cpg	111.20	J/mol×K	374.81	Joback Method
cpg	117.85	J/mol×K	403.11	Joback Method
cpg	124.25	J/mol×K	431.41	Joback Method
cpg	130.43	J/mol×K	459.71	Joback Method
cpg	136.39	J/mol×K	488.01	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.38213e+01
Coeff. B	-2.17648e+03
Coeff. C	-7.25010e+01
Temperature range (K), min.	233.32
Temperature range (K), max.	475.00

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=C624782&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

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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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