Benzenamine, N-ethyl-N-methyl-

Other names:	(C2H5)N(CH3)-C6H5
	Aniline, N-ethyl-N-methyl-
	Ethyl-methyl-phenyl-amine
	Ethylmethylaniline
	Methylethyl aniline
	N,N-Methyl-ethyl-aniline
	N-Ethyl-N-methylaniline
	N-Ethyl-N-methylbenzenamine
	N-Methyl-N-ethylaniline
Inchi:	InChI=1S/C9H13N/c1-3-10(2)9-7-5-4-6-8-9/h4-8H,3H2,1-2H3
InchiKey:	PPHQUIPUBYPZLD-UHFFFAOYSA-N
Formula:	C9H13N
SMILES:	CCN(C)c1ccccc1
Mol. weight [g/mol]:	135.21
CAS:	613-97-8

Physical Properties

Property code	Value	Unit	Source
affp	939.00	kJ/mol	NIST Webbook
basg	912.40	kJ/mol	NIST Webbook
gf	248.09	kJ/mol	Joback Method
hf	74.97	kJ/mol	Joback Method
hfus	16.13	kJ/mol	Joback Method
hvap	39.95	kJ/mol	Joback Method
ie	7.37	eV	NIST Webbook
log10ws	-1.80		Crippen Method
logp	2.143		Crippen Method
mcvol	123.890	ml/mol	McGowan Method
pc	3254.14	kPa	Joback Method
tb	475.15 ± 2.00	K	NIST Webbook
tb	477.20	K	NIST Webbook
tc	648.92	K	Joback Method
tf	250.08	K	Joback Method
vc	0.450	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	245.34	J/mol×K	444.44	Joback Method
cpg	260.43	J/mol×K	478.52	Joback Method
cpg	274.63	J/mol×K	512.60	Joback Method
cpg	287.98	J/mol×K	546.68	Joback Method
cpg	300.52	J/mol×K	580.76	Joback Method
cpg	312.29	J/mol×K	614.84	Joback Method
cpg	323.32	J/mol×K	648.92	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.47882e+01
Coeff. B	-4.10253e+03
Coeff. C	-7.37980e+01
Temperature range (K), min.	356.72
Temperature range (K), max.	506.71

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C613978&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

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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