Benzenamine, N,N,2,6-tetramethyl-

Other names:	2,6-Dimethyl-N,N-dimethylaniline
	2,6-Xylidine, N,N-dimethyl-
	N,N,2,6-Tetramethylaniline
	N,N,2,6-Tetramethylbenzenamine
	N,N-Dimethyl-2,6-dimethylaniline
Inchi:	InChI=1S/C10H15N/c1-8-6-5-7-9(2)10(8)11(3)4/h5-7H,1-4H3
InchiKey:	SCVRZFQSPISLTD-UHFFFAOYSA-N
Formula:	C10H15N
SMILES:	Cc1cccc(C)c1N(C)C
Mol. weight [g/mol]:	149.23
CAS:	769-06-2

Physical Properties

Property code	Value	Unit	Source
affp	954.10	kJ/mol	NIST Webbook
basg	923.20	kJ/mol	NIST Webbook
gf	237.25	kJ/mol	Joback Method
hf	31.39	kJ/mol	Joback Method
hfus	17.94	kJ/mol	Joback Method
hvap	43.50	kJ/mol	Joback Method
ie	7.83 ± 0.06	eV	NIST Webbook
ie	7.22	eV	NIST Webbook
ie	7.30 ± 0.02	eV	NIST Webbook
ie	7.42	eV	NIST Webbook
log10ws	-2.33		Crippen Method
logp	2.369		Crippen Method
mcvol	137.980	ml/mol	McGowan Method
pc	2832.35	kPa	Joback Method
tb	477.28	K	Joback Method
tc	681.78	K	Joback Method
tf	286.39	K	Joback Method
vc	0.505	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	290.18	J/mol×K	477.28	Joback Method
cpg	305.33	J/mol×K	511.36	Joback Method
cpg	319.69	J/mol×K	545.45	Joback Method
cpg	333.27	J/mol×K	579.53	Joback Method
cpg	346.11	J/mol×K	613.61	Joback Method
cpg	358.24	J/mol×K	647.70	Joback Method
cpg	369.68	J/mol×K	681.78	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.30253e+01
Coeff. B	-3.55058e+03
Coeff. C	-7.15740e+01
Temperature range (K), min.	350.32
Temperature range (K), max.	531.86

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C769062&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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