2-Butanamine, 3-methyl-

Other names:	1,2-Dimethylpropanamine
	1,2-Dimethylpropylamine
	2-Amino-3-methylbutane
	3-Methyl-2-aminobutane
	Propylamine, 1,2-dimethyl-
Inchi:	InChI=1S/C5H13N/c1-4(2)5(3)6/h4-5H,6H2,1-3H3
InchiKey:	JOZZAIIGWFLONA-UHFFFAOYSA-N
Formula:	C5H13N
SMILES:	CC(C)C(C)N
Mol. weight [g/mol]:	87.16
CAS:	598-74-3

Physical Properties

Property code	Value	Unit	Source
gf	52.79	kJ/mol	Joback Method
hf	-123.30	kJ/mol	Joback Method
hfus	6.86	kJ/mol	Joback Method
hvap	36.59	kJ/mol	Joback Method
log10ws	-1.22		Crippen Method
logp	0.990		Crippen Method
mcvol	91.290	ml/mol	McGowan Method
pc	3786.98	kPa	Joback Method
tb	356.15 ± 4.00	K	NIST Webbook
tb	351.65 ± 5.00	K	NIST Webbook
tb	358.70	K	NIST Webbook
tc	575.26	K	Joback Method
tf	199.37	K	Joback Method
vc	0.333	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	173.52	J/mol×K	385.45	Joback Method
cpg	184.32	J/mol×K	417.09	Joback Method

cpg	194.68	J/mol×K	448.72	Joback Method
cpg	204.60	J/mol×K	480.36	Joback Method
cpg	214.08	J/mol×K	511.99	Joback Method
cpg	223.16	J/mol×K	543.63	Joback Method
cpg	231.82	J/mol×K	575.26	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.37435e+01
Coeff. B	-2.52076e+03
Coeff. C	-8.24570e+01
Temperature range (K), min.	269.79
Temperature range (K), max.	381.41

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=C598743&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