1-Butanamine, 2-methyl-N-(2-methylbutyl)-

Other names: bis-(2-Methylbutyl)amine
N,N-bis(2-methylbutyl)amine
Inchi: InChI=1S/C10H23N/c1-5-9(3)7-11-8-10(4)6-2/h9-11H,5-8H2,1-4H3
InchiKey: GNSBJLGFTFJIAC-UHFFFAOYSA-N
Formula: C10H23N
SMILES: CCC(C)CNCC(C)CC
Mol. weight [g/mol]: 157.30
CAS: 27094-65-1

Physical Properties

Property code	Value	Unit	Source
gf	117.83	kJ/mol	Joback Method
hf	-206.82	kJ/mol	Joback Method
hfus	19.71	kJ/mol	Joback Method
hvap	43.51	kJ/mol	Joback Method
log10ws	-2.71		Crippen Method
logp	2.668		Crippen Method
mcvol	161.740	ml/mol	McGowan Method
pc	2165.35	kPa	Joback Method
rinpol	1065.00		NIST Webbook
tb	459.65 ± 3.00	K	NIST Webbook
tc	650.76	K	Joback Method
tf	225.12	K	Joback Method
vc	0.619	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	368.34	J/mol×K	477.49	Joback Method
cpg	384.54	J/mol×K	506.37	Joback Method
cpg	400.08	J/mol×K	535.25	Joback Method
cpg	414.98	J/mol×K	564.12	Joback Method
cpg	429.25	J/mol×K	593.00	Joback Method
cpg	442.91	J/mol×K	621.88	Joback Method

cpg	455.97	J/mol×K	650.76	Joback Method

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=C27094651&Units=SI

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume