(R)-sec-butylamine

Other names: 2-Butanamine, (R)-
Inchi: InChI=1S/C4H11N/c1-3-4(2)5/h4H,3,5H2,1-2H3/t4-/m0/s1
InchiKey: BHRZNVHARXXAHW-BYPYZUCNSA-N
Formula: C4H11N
SMILES: CCC(C)N
Mol. weight [g/mol]: 73.14
CAS: 13250-12-9

Physical Properties

Property code	Value	Unit	Source
gf	46.81	kJ/mol	Joback Method
hf	-97.38	kJ/mol	Joback Method
hfus	7.79	kJ/mol	Joback Method
hvap	34.75	kJ/mol	Joback Method
log10ws	-1.04		Crippen Method
logp	0.744		Crippen Method
mcvol	77.200	ml/mol	McGowan Method
pc	4233.04	kPa	Joback Method
tb	336.20	K	NIST Webbook
tc	549.17	K	Joback Method
tf	203.10	K	Joback Method
vc	0.282	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	138.58	J/mol×K	363.01	Joback Method
cpg	147.57	J/mol×K	394.04	Joback Method
cpg	156.20	J/mol×K	425.06	Joback Method
cpg	164.49	J/mol×K	456.09	Joback Method
cpg	172.44	J/mol×K	487.12	Joback Method
cpg	180.06	J/mol×K	518.14	Joback Method
cpg	187.35	J/mol×K	549.17	Joback Method

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=C13250129&Units=SI
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume