

t-Boc-sarcosine

Other names:	Boc-sarcosine N-t-Boc-sarcosine Glycine, N-[(1,1-dimethylethoxy)carbonyl]-N-methyl- N-[(1,1-Dimethylethoxy)carbonyl]-N-methylglycine Glycine, N-methyl-N-(t-butoxycarbonyl)- N-tert-Butoxycarbonylsarcosine N-[(1,1-dimethylethoxy)carbonyl]sarcosine
Inchi:	InChI=1S/C8H15NO4/c1-8(2,3)13-7(12)9(4)5-6(10)11/h5H2,1-4H3,(H,10,11)
InchiKey:	YRXIMPFOTQVOHG-UHFFFAOYSA-N
Formula:	C8H15NO4
SMILES:	CN(CC(=O)O)C(=O)OC(C)(C)C
Mol. weight [g/mol]:	189.21
CAS:	13734-36-6

Physical Properties

Property code	Value	Unit	Source
gf	-369.56	kJ/mol	Joback Method
hf	-659.28	kJ/mol	Joback Method
hfus	20.56	kJ/mol	Joback Method
hvap	66.73	kJ/mol	Joback Method
log10ws	-0.79		Crippen Method
logp	0.938		Crippen Method
mcvol	148.440	ml/mol	McGowan Method
pc	3199.16	kPa	Joback Method
tb	613.99	K	Joback Method
tc	797.55	K	Joback Method
tf	397.72	K	Joback Method
vc	0.539	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.30	J/mol×K	613.99	Joback Method
cpg	399.19	J/mol×K	644.58	Joback Method

cpg	409.46	J/mol×K	675.18	Joback Method
cpg	419.15	J/mol×K	705.77	Joback Method
cpg	428.28	J/mol×K	736.36	Joback Method
cpg	436.86	J/mol×K	766.95	Joback Method
cpg	444.92	J/mol×K	797.55	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=C13734366&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

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