Bis-(beta-dimethylaminoethyl)succinate

Other names: bis[2-(dimethylamino)ethyl] succinate
Inchi: InChI=1S/C12H24N2O4/c1-13(2)7-9-17-11(15)5-6-12(16)18-10-8-14(3)4/h5-10H2,1-4H3
InchiKey: JSINVKLVDNFTSU-UHFFFAOYSA-N
Formula: C12H24N2O4
SMILES: CN(C)CCOC(=O)CCC(=O)OCCN(C)C
Mol. weight [g/mol]: 260.33
CAS: 19249-04-8

Physical Properties

Property code	Value	Unit	Source
gf	-196.12	kJ/mol	Joback Method
hf	-645.55	kJ/mol	Joback Method
hfus	38.45	kJ/mol	Joback Method
hvap	64.70	kJ/mol	Joback Method
log10ws	0.29		Crippen Method
logp	-0.024		Crippen Method
mcvol	214.780	ml/mol	McGowan Method
pc	1920.30	kPa	Joback Method
tb	651.42	K	Joback Method
tc	826.52	K	Joback Method
tf	434.26	K	Joback Method
vc	0.791	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	593.42	J/mol×K	651.42	Joback Method
cpg	608.65	J/mol×K	680.60	Joback Method
cpg	623.14	J/mol×K	709.79	Joback Method
cpg	636.90	J/mol×K	738.97	Joback Method
cpg	649.94	J/mol×K	768.16	Joback Method
cpg	662.28	J/mol×K	797.34	Joback Method
cpg	673.93	J/mol×K	826.52	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=C19249048&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume