2,3-Bis(difluoroamino)-2-methylbutane

Inchi: InChI=1S/C5H10F4N2/c1-4(10(6)7)5(2,3)11(8)9/h4H,1-3H3
InchiKey: WFEFNDFIKZZYEE-UHFFFAOYSA-N
Formula: C5H10F4N2
SMILES: CC(N(F)F)C(C)(C)N(F)F
Mol. weight [g/mol]: 174.14
CAS: 21363-83-7

Physical Properties

Property code	Value	Unit	Source
gf	-566.06	kJ/mol	Joback Method
hf	-809.94	kJ/mol	Joback Method
hfl	-244.80	kJ/mol	NIST Webbook
hfus	16.13	kJ/mol	Joback Method
hvap	25.86	kJ/mol	Joback Method
log10ws	-2.65		Crippen Method
logp	2.296		Crippen Method
mcvol	108.350	ml/mol	McGowan Method
pc	2906.11	kPa	Joback Method
tb	332.09	K	Joback Method
tc	473.09	K	Joback Method
tf	200.83	K	Joback Method
vc	0.406	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	205.10	J/mol×K	332.09	Joback Method
cpg	216.65	J/mol×K	355.59	Joback Method
cpg	227.67	J/mol×K	379.09	Joback Method
cpg	238.17	J/mol×K	402.59	Joback Method
cpg	248.17	J/mol×K	426.09	Joback Method
cpg	257.69	J/mol×K	449.59	Joback Method
cpg	266.75	J/mol×K	473.09	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=C21363837&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase 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