Benzamide, 3,4-difluoro-N-hexadecyl-

Inchi: InChI=1S/C23H37F2NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-18-26-23(27)20-16-17-21
InchiKey: ITSGXZHXXWTGQN-UHFFFAOYSA-N
Formula: C23H37F2NO
SMILES: CCCCCCCCCCCCCCCCCNC(=O)c1ccc(F)c(F)c1
Mol. weight [g/mol]: 381.54

Physical Properties

Property code	Value	Unit	Source
gf	-193.22	kJ/mol	Joback Method
hf	-755.79	kJ/mol	Joback Method
hfus	61.45	kJ/mol	Joback Method
hvap	81.94	kJ/mol	Joback Method
log10ws	-8.76		Crippen Method
logp	7.176		Crippen Method
mcvol	326.260	ml/mol	McGowan Method
pc	1014.89	kPa	Joback Method
rinpol	2865.00		NIST Webbook
rinpol	2865.00		NIST Webbook
tb	864.86	K	Joback Method
tc	1059.83	K	Joback Method
tf	504.20	K	Joback Method
vc	1.292	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1053.23	J/mol×K	864.86	Joback Method
cpg	1071.26	J/mol×K	897.35	Joback Method
cpg	1088.21	J/mol×K	929.85	Joback Method
cpg	1104.13	J/mol×K	962.34	Joback Method
cpg	1119.08	J/mol×K	994.84	Joback Method
cpg	1133.10	J/mol×K	1027.33	Joback Method
cpg	1146.24	J/mol×K	1059.83	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=U407803&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