Benzamide, 2,6-difluoro-3-methyl-N-hexadecyl-

Inchi: InChI=1S/C24H39F2NO/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-19-27-24(28)22-21(25)1

InchiKey: LYNKKDIVDLYLGN-UHFFFAOYSA-N

Formula: C24H39F2NO

SMILES: CCCCCCCCCCCCCCCCNC(=O)c1c(F)ccc(C)c1F

Mol. weight [g/mol]: 395.57

Physical Properties

Property code	Value	Unit	Source
gf	-194.43	kJ/mol	Joback Method
hf	-787.90	kJ/mol	Joback Method
hfus	63.65	kJ/mol	Joback Method
hvap	84.83	kJ/mol	Joback Method
log10ws	-9.23		Crippen Method
logp	7.484		Crippen Method
mcvol	340.350	ml/mol	McGowan Method
pc	946.75	kPa	Joback Method
rinpol	2992.00		NIST Webbook
rinpol	2992.00		NIST Webbook
tb	892.72	K	Joback Method
tc	1093.01	K	Joback Method
tf	527.99	K	Joback Method
vc	1.349	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1114.68	J/mol×K	892.72	Joback Method
cpg	1133.11	J/mol×K	926.10	Joback Method
cpg	1150.40	J/mol×K	959.48	Joback Method
cpg	1166.59	J/mol×K	992.87	Joback Method
cpg	1181.75	J/mol×K	1026.25	Joback Method
cpg	1195.92	J/mol×K	1059.63	Joback Method
cpg	1209.15	J/mol×K	1093.01	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407750&Units=SI
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

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