Benzamide, N,N-didecyl-2,6-difluoro-

Inchi: InChI=1S/C27H45F2NO/c1-3-5-7-9-11-13-15-17-22-30(23-18-16-14-12-10-8-6-4-2)27(31
InchiKey: GIGWVCKRDVKIIL-UHFFFAOYSA-N
Formula: C27H45F2NO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)c1c(F)cccc1F
Mol. weight [g/mol]: 437.65

Physical Properties

Property code	Value	Unit	Source
gf	-138.15	kJ/mol	Joback Method
hf	-824.29	kJ/mol	Joback Method
hfus	69.73	kJ/mol	Joback Method
hvap	86.45	kJ/mol	Joback Method
log10ws	-9.81		Crippen Method
logp	8.688		Crippen Method
mcvol	382.620	ml/mol	McGowan Method
pc	798.89	kPa	Joback Method
rinpol	2864.00		NIST Webbook
rinpol	2864.00		NIST Webbook
tb	918.65	K	Joback Method
tc	1125.97	K	Joback Method
tf	529.09	K	Joback Method
vc	1.500	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1282.41	J/mol×K	918.65	Joback Method
cpg	1303.01	J/mol×K	953.20	Joback Method
cpg	1322.32	J/mol×K	987.76	Joback Method
cpg	1340.43	J/mol×K	1022.31	Joback Method
cpg	1357.41	J/mol×K	1056.86	Joback Method
cpg	1373.35	J/mol×K	1091.41	Joback Method
cpg	1388.32	J/mol×K	1125.97	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308672&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

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