Benzamide, 2,4-difluoro-N-(2,4-difluorobenzoyl)-N-octadecyl-

Inchi: InChI=1S/C32H43F4NO2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-22-37(31(38)27-2

InchiKey: UQEKQJDZYCZYAH-UHFFFAOYSA-N

Formula: C32H43F4NO2

SMILES: CCCCCCCCCCCCCCCCCCN(C(=O)c1ccc(F)cc1F)C(=O)c1ccc(F)cc1F

Mol. weight [g/mol]: 549.68

Physical Properties

Property code	Value	Unit	Source
gf	-521.44	kJ/mol	Joback Method
hf	-1218.70	kJ/mol	Joback Method
hfus	83.70	kJ/mol	Joback Method
hvap	106.29	kJ/mol	Joback Method
log10ws	-12.03		Crippen Method
logp	9.787		Crippen Method
mcvol	434.420	ml/mol	McGowan Method
pc	713.39	kPa	Joback Method
rinpol	3437.00		NIST Webbook
rinpol	3437.00		NIST Webbook
tb	1122.10	K	Joback Method
tc	1400.64	K	Joback Method
tf	688.01	K	Joback Method
vc	1.714	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1524.44	J/mol×K	1122.10	Joback Method
cpg	1543.32	J/mol×K	1168.52	Joback Method
cpg	1560.55	J/mol×K	1214.95	Joback Method
cpg	1576.35	J/mol×K	1261.37	Joback Method
cpg	1590.96	J/mol×K	1307.80	Joback Method
cpg	1604.58	J/mol×K	1354.22	Joback Method
cpg	1617.42	J/mol×K	1400.64	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407633&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