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

Inchi: InChI=1S/C23H25F4NO2/c1-2-3-4-5-6-7-8-13-28(22(29)18-11-9-16(24)14-20(18)26)23(3

InchiKey: IKPVSUBASYPLOA-UHFFFAOYSA-N

Formula: C23H25F4NO2

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

Mol. weight [g/mol]: 423.44

Physical Properties

Property code	Value	Unit	Source
gf	-597.22	kJ/mol	Joback Method
hf	-1032.94	kJ/mol	Joback Method
hfus	60.39	kJ/mol	Joback Method
hvap	86.26	kJ/mol	Joback Method
log10ws	-8.26		Crippen Method
logp	6.276		Crippen Method
mcvol	307.610	ml/mol	McGowan Method
pc	1205.63	kPa	Joback Method
rinpol	2516.00		NIST Webbook
rinpol	2516.00		NIST Webbook
tb	916.18	K	Joback Method
tc	1124.44	K	Joback Method
tf	586.58	K	Joback Method
vc	1.210	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	968.78	J/mol×K	916.18	Joback Method
cpg	982.88	J/mol×K	950.89	Joback Method
cpg	995.93	J/mol×K	985.60	Joback Method
cpg	1008.01	J/mol×K	1020.31	Joback Method
cpg	1019.16	J/mol×K	1055.02	Joback Method
cpg	1029.47	J/mol×K	1089.73	Joback Method
cpg	1038.99	J/mol×K	1124.44	Joback Method

Sources

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=U407627&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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