Benzamide, N,N-dinonyl-2-fluoro-

Inchi: InChI=1S/C25H42FNO/c1-3-5-7-9-11-13-17-21-27(22-18-14-12-10-8-6-4-2)25(28)23-19-
InchiKey: KGTAEYVTVAMVMX-UHFFFAOYSA-N
Formula: C25H42FNO
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)c1ccccc1F
Mol. weight [g/mol]: 391.61

Physical Properties

Property code	Value	Unit	Source
gf	49.45	kJ/mol	Joback Method
hf	-575.43	kJ/mol	Joback Method
hfus	61.86	kJ/mol	Joback Method
hvap	82.15	kJ/mol	Joback Method
log10ws	-8.64		Crippen Method
logp	7.769		Crippen Method
mcvol	352.670	ml/mol	McGowan Method
pc	926.11	kPa	Joback Method
rinpol	2761.00		NIST Webbook
tb	868.64	K	Joback Method
tc	1064.24	K	Joback Method
tf	493.44	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1148.91	J/mol×K	868.64	Joback Method
cpg	1168.64	J/mol×K	901.24	Joback Method
cpg	1187.22	J/mol×K	933.84	Joback Method
cpg	1204.72	J/mol×K	966.44	Joback Method
cpg	1221.19	J/mol×K	999.04	Joback Method
cpg	1236.70	J/mol×K	1031.64	Joback Method
cpg	1251.33	J/mol×K	1064.24	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=U308100&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