Benzamide, 2-fluoro-N-ethyl-N-decyl-

Inchi: InChI=1S/C19H30FNO/c1-3-5-6-7-8-9-10-13-16-21(4-2)19(22)17-14-11-12-15-18(17)20/
InchiKey: DWHZKVWGBYYJMA-UHFFFAOYSA-N
Formula: C19H30FNO
SMILES: CCCCCCCCCCN(CC)C(=O)c1ccccc1F
Mol. weight [g/mol]: 307.45

Physical Properties

Property code	Value	Unit	Source
gf	-1.07	kJ/mol	Joback Method
hf	-451.59	kJ/mol	Joback Method
hfus	46.32	kJ/mol	Joback Method
hvap	68.80	kJ/mol	Joback Method
log10ws	-6.13		Crippen Method
logp	5.428		Crippen Method
mcvol	268.130	ml/mol	McGowan Method
pc	1361.64	kPa	Joback Method
rinpol	2463.00		NIST Webbook
rinpol	2463.00		NIST Webbook
tb	731.36	K	Joback Method
tc	916.73	K	Joback Method
tf	425.82	K	Joback Method
vc	1.034	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	786.86	J/mol×K	731.36	Joback Method
cpg	804.66	J/mol×K	762.26	Joback Method
cpg	821.48	J/mol×K	793.15	Joback Method
cpg	837.36	J/mol×K	824.05	Joback Method
cpg	852.35	J/mol×K	854.94	Joback Method
cpg	866.49	J/mol×K	885.84	Joback Method
cpg	879.83	J/mol×K	916.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415382&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