Benzamide, 2-fluoro-N-ethyl-N-tetradecyl-

Inchi: InChI=1S/C23H38FNO/c1-3-5-6-7-8-9-10-11-12-13-14-17-20-25(4-2)23(26)21-18-15-16-
InchiKey: XKBDVQMCMGEWHT-UHFFFAOYSA-N
Formula: C23H38FNO
SMILES: CCCCCCCCCCCCCCN(CC)C(=O)c1ccccc1F
Mol. weight [g/mol]: 363.55

Physical Properties

Property code	Value	Unit	Source
gf	32.61	kJ/mol	Joback Method
hf	-534.15	kJ/mol	Joback Method
hfus	56.68	kJ/mol	Joback Method
hvap	77.70	kJ/mol	Joback Method
log10ws	-7.81		Crippen Method
logp	6.989		Crippen Method
mcvol	324.490	ml/mol	McGowan Method
pc	1044.62	kPa	Joback Method
rinpol	3088.00		NIST Webbook
rinpol	3088.00		NIST Webbook
tb	822.88	K	Joback Method
tc	1012.25	K	Joback Method
tf	470.90	K	Joback Method
vc	1.258	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1025.02	J/mol×K	822.88	Joback Method
cpg	1044.00	J/mol×K	854.44	Joback Method
cpg	1061.90	J/mol×K	886.00	Joback Method
cpg	1078.78	J/mol×K	917.56	Joback Method
cpg	1094.70	J/mol×K	949.12	Joback Method
cpg	1109.71	J/mol×K	980.68	Joback Method
cpg	1123.87	J/mol×K	1012.25	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415385&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