Pentafluoropropanamide, N-pentyl-

Inchi: InChI=1S/C8H12F5NO/c1-2-3-4-5-14-6(15)7(9,10)8(11,12)13/h2-5H2,1H3,(H,14,15)
InchiKey: ZDTRGNGXDFYEBK-UHFFFAOYSA-N
Formula: C8H12F5NO
SMILES: CCCCCNC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 233.18

Physical Properties

Property code	Value	Unit	Source
gf	-991.42	kJ/mol	Joback Method
hf	-1265.61	kJ/mol	Joback Method
hfus	23.75	kJ/mol	Joback Method
hvap	39.91	kJ/mol	Joback Method
log10ws	-3.11		Crippen Method
logp	2.490		Crippen Method
mcvol	143.980	ml/mol	McGowan Method
pc	2274.07	kPa	Joback Method
rinpol	983.00		NIST Webbook
rinpol	983.00		NIST Webbook
tb	476.37	K	Joback Method
tc	634.26	K	Joback Method
tf	290.30	K	Joback Method
vc	0.593	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.14	J/mol×K	476.37	Joback Method
cpg	361.22	J/mol×K	502.68	Joback Method
cpg	372.63	J/mol×K	529.00	Joback Method
cpg	383.41	J/mol×K	555.31	Joback Method
cpg	393.58	J/mol×K	581.63	Joback Method
cpg	403.17	J/mol×K	607.94	Joback Method
cpg	412.21	J/mol×K	634.26	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407333&Units=SI

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