Benzamide, pentafluoro-N-tetradecyl-

Inchi: InChI=1S/C21H30F5NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-27-21(28)15-16(22)18(24)20
InchiKey: YAEANERRWWVANQ-UHFFFAOYSA-N
Formula: C21H30F5NO
SMILES: CCCCCCCCCCCCCCNC(=O)c1c(F)c(F)c(F)c(F)c1F
Mol. weight [g/mol]: 407.46

Physical Properties

Property code	Value	Unit	Source
gf	-823.38	kJ/mol	Joback Method
hf	-1337.25	kJ/mol	Joback Method
hfus	64.34	kJ/mol	Joback Method
hvap	77.02	kJ/mol	Joback Method
log10ws	-8.92		Crippen Method
logp	6.813		Crippen Method
mcvol	303.390	ml/mol	McGowan Method
pc	1022.69	kPa	Joback Method
rinpol	2495.00		NIST Webbook
tb	831.85	K	Joback Method
tc	1018.66	K	Joback Method
tf	520.99	K	Joback Method
vc	1.234	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	953.03	J/mol×K	831.85	Joback Method
cpg	969.34	J/mol×K	862.98	Joback Method
cpg	984.71	J/mol×K	894.12	Joback Method
cpg	999.15	J/mol×K	925.25	Joback Method
cpg	1012.71	J/mol×K	956.39	Joback Method
cpg	1025.42	J/mol×K	987.52	Joback Method
cpg	1037.30	J/mol×K	1018.66	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=U407949&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