Benzamide, pentafluoro-N-undecyl-

Inchi: InChI=1S/C18H24F5NO/c1-2-3-4-5-6-7-8-9-10-11-24-18(25)12-13(19)15(21)17(23)16(22
InchiKey: YNNHBXRQHWFWEP-UHFFFAOYSA-N
Formula: C18H24F5NO
SMILES: CCCCCCCCCCCNC(=O)c1c(F)c(F)c(F)c(F)c1F
Mol. weight [g/mol]: 365.38

Physical Properties

Property code	Value	Unit	Source
gf	-848.64	kJ/mol	Joback Method
hf	-1275.33	kJ/mol	Joback Method
hfus	56.57	kJ/mol	Joback Method
hvap	70.34	kJ/mol	Joback Method
log10ws	-7.66		Crippen Method
logp	5.643		Crippen Method
mcvol	261.120	ml/mol	McGowan Method
pc	1240.71	kPa	Joback Method
rinpol	2194.00		NIST Webbook
rinpol	2194.00		NIST Webbook
tb	763.21	K	Joback Method
tc	940.12	K	Joback Method
tf	487.18	K	Joback Method
vc	1.067	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	777.99	J/mol×K	763.21	Joback Method
cpg	792.71	J/mol×K	792.70	Joback Method
cpg	806.66	J/mol×K	822.18	Joback Method
cpg	819.85	J/mol×K	851.67	Joback Method
cpg	832.31	J/mol×K	881.15	Joback Method
cpg	844.05	J/mol×K	910.64	Joback Method
cpg	855.10	J/mol×K	940.12	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407947&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