Benzamide, pentafluoro-N-dodecyl-

Inchi: InChI=1S/C19H26F5NO/c1-2-3-4-5-6-7-8-9-10-11-12-25-19(26)13-14(20)16(22)18(24)17
InchiKey: AZAFPRZXBKPVJU-UHFFFAOYSA-N
Formula: C19H26F5NO
SMILES: CCCCCCCCCCCCNC(=O)c1c(F)c(F)c(F)c(F)c1F
Mol. weight [g/mol]: 379.41

Physical Properties

Property code	Value	Unit	Source
gf	-840.22	kJ/mol	Joback Method
hf	-1295.97	kJ/mol	Joback Method
hfus	59.16	kJ/mol	Joback Method
hvap	72.57	kJ/mol	Joback Method
log10ws	-8.08		Crippen Method
logp	6.033		Crippen Method
mcvol	275.210	ml/mol	McGowan Method
pc	1160.87	kPa	Joback Method
rinpol	2295.00		NIST Webbook
rinpol	2295.00		NIST Webbook
tb	786.09	K	Joback Method
tc	965.55	K	Joback Method
tf	498.45	K	Joback Method
vc	1.123	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	835.41	J/mol×K	786.09	Joback Method
cpg	850.65	J/mol×K	816.00	Joback Method
cpg	865.06	J/mol×K	845.91	Joback Method
cpg	878.67	J/mol×K	875.82	Joback Method
cpg	891.50	J/mol×K	905.73	Joback Method
cpg	903.57	J/mol×K	935.64	Joback Method
cpg	914.91	J/mol×K	965.55	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407948&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