Benzamide, pentafluoro-N-(pentafluorobenzoyl)-N-methyl-

Inchi: InChI=1S/C15H3F10NO2/c1-26(14(27)2-4(16)8(20)12(24)9(21)5(2)17)15(28)3-6(18)10(2

InchiKey: JOBHSYHTERJYGG-UHFFFAOYSA-N

Formula: C15H3F10NO2

SMILES: CN(C(=O)c1c(F)c(F)c(F)c(F)c1F)C(=O)c1c(F)c(F)c(F)c(F)c1F

Mol. weight [g/mol]: 419.17

Physical Properties

Property code	Value	Unit	Source
gf	-1891.22	kJ/mol	Joback Method
hf	-2113.30	kJ/mol	Joback Method
hfus	55.82	kJ/mol	Joback Method
hvap	67.52	kJ/mol	Joback Method
log10ws	-6.90		Crippen Method
logp	3.990		Crippen Method
mcvol	205.510	ml/mol	McGowan Method
pc	1636.45	kPa	Joback Method
rinpol	1549.00		NIST Webbook
tb	758.64	K	Joback Method
tc	938.71	K	Joback Method
tf	575.08	K	Joback Method
vc	0.870	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	559.06	J/mol×K	758.64	Joback Method
cpg	567.67	J/mol×K	788.65	Joback Method
cpg	575.71	J/mol×K	818.66	Joback Method
cpg	583.18	J/mol×K	848.67	Joback Method
cpg	590.10	J/mol×K	878.68	Joback Method
cpg	596.46	J/mol×K	908.70	Joback Method
cpg	602.28	J/mol×K	938.71	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407952&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