N-Benzoyl-N-phenylhydroxylamine

Other names:	Benzamide, N-hydroxy-N-phenyl-
	Benzohydroxamic acid, N-phenyl-
	N-Benzoyl-N-phenylhydroxamic acid
	N-Benzoylphenylhydroxylamine
	N-Hydroxy-N-phenylbenzamide
	N-Hydroxybenzanilide
	N-Phenylbenzohydroxamic acid
	N-Phenylbenzohyroxamic acid
	NSC 42454
Inchi:	InChI=1S/C13H11NO2/c15-13(11-7-3-1-4-8-11)14(16)12-9-5-2-6-10-12/h1-10,16H
InchiKey:	YLYIXDZITBMCIW-UHFFFAOYSA-N
Formula:	C13H11NO2
SMILES:	O=C(c1ccccc1)N(O)c1ccccc1
Mol. weight [g/mol]:	213.23
CAS:	304-88-1

Physical Properties

Property code	Value	Unit	Source
gf	128.44	kJ/mol	Joback Method
hf	-35.87	kJ/mol	Joback Method
hfus	26.22	kJ/mol	Joback Method
hvap	74.55	kJ/mol	Joback Method
log10ws	-1.89		Aqueous Solubility Prediction Method
logp	2.723		Crippen Method
mcvol	163.930	ml/mol	McGowan Method
pc	3668.65	kPa	Joback Method
tb	708.69	K	Joback Method
tc	935.19	K	Joback Method
tf	432.33	K	Joback Method
vc	0.591	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.18	J/mol×K	708.69	Joback Method
cpg	441.05	J/mol×K	746.44	Joback Method
cpg	451.92	J/mol×K	784.19	Joback Method
cpg	461.87	J/mol×K	821.94	Joback Method
cpg	470.98	J/mol×K	859.69	Joback Method
cpg	479.32	J/mol×K	897.44	Joback Method
cpg	486.96	J/mol×K	935.19	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Joback Method: https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C304881&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume