Benzamide, N-hydroxy-

Other names:	Benzohydroxamic acid
	Hydroxylamine, N-benzoyl-
	Phenylhydroxamic acid
	Benzhydroxamic acid
	N-Hydroxybenzamide
	Benzoylhydroxamic acid
Inchi:	InChI=1S/C7H7NO2/c9-7(8-10)6-4-2-1-3-5-6/h1-5,10H,(H,8,9)
InchiKey:	VDEUYMSGMPQMIK-UHFFFAOYSA-N
Formula:	C7H7NO2
SMILES:	O=C(NO)c1ccccc1
Mol. weight [g/mol]:	137.14
CAS:	495-18-1

Physical Properties

Property code	Value	Unit	Source
gf	-55.88	kJ/mol	Joback Method
hf	-162.62	kJ/mol	Joback Method
hfus	18.71	kJ/mol	Joback Method
hvap	63.31	kJ/mol	Joback Method
log10ws	-1.05		Crippen Method
logp	0.806		Crippen Method
mcvol	103.150	ml/mol	McGowan Method
pc	5168.28	kPa	Joback Method
tb	582.46	K	Joback Method
tc	792.21	K	Joback Method
tf	358.48	K	Joback Method
vc	0.380	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	234.88	J/mol×K	582.46	Joback Method
cpg	243.68	J/mol×K	617.42	Joback Method
cpg	251.87	J/mol×K	652.38	Joback Method

cpg	259.48	J/mol×K	687.33	Joback Method
cpg	266.55	J/mol×K	722.29	Joback Method
cpg	273.10	J/mol×K	757.25	Joback Method
cpg	279.15	J/mol×K	792.21	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C495181&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