Benzamide, N-benzoyl-

Other names:	Alpha-benzil monoxime
	Benzoic acid, imide
	Dibenzamide
	Dibenzimide
	Dibenzoylamine
	dibenzamid
Inchi:	InChI=1S/C14H11NO2/c16-13(11-7-3-1-4-8-11)15-14(17)12-9-5-2-6-10-12/h1-10H,(H,15
InchiKey:	ZHDORMMHAKXTPT-UHFFFAOYSA-N
Formula:	C14H11NO2
SMILES:	O=C(NC(=O)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	225.24
CAS:	614-28-8

Physical Properties

Property code	Value	Unit	Source
chs	-6836.39	kJ/mol	NIST Webbook
gf	123.37	kJ/mol	Joback Method
hf	-30.92	kJ/mol	Joback Method
hfus	28.40	kJ/mol	Joback Method
hvap	71.24	kJ/mol	Joback Method
log10ws	-2.27		Aqueous Solubility Prediction Method
logp	2.257		Crippen Method
mcvol	173.720	ml/mol	McGowan Method
pc	3224.64	kPa	Joback Method
tb	730.99	K	Joback Method
tc	980.09	K	Joback Method
tf	452.90	K	Joback Method
vc	0.650	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	454.36	J/mol×K	730.99	Joback Method

cpg	467.37	J/mol×K	772.51	Joback Method
cpg	479.18	J/mol×K	814.02	Joback Method
cpg	489.86	J/mol×K	855.54	Joback Method
cpg	499.50	J/mol×K	897.06	Joback Method
cpg	508.19	J/mol×K	938.58	Joback Method
cpg	516.01	J/mol×K	980.09	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C614288&Units=SI
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

Legend

chs: Standard solid enthalpy of combustion
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