Methanone, bis(2-hydroxyphenyl)-

Other names:	Benzophenone, 2,2'-dihydroxy- 2,2'-Dihydroxybenzophenone
Inchi:	InChI=1S/C13H10O3/c14-11-7-3-1-5-9(11)13(16)10-6-2-4-8-12(10)15/h1-8,14-15H
InchiKey:	YIYBRXKMQFDHSM-UHFFFAOYSA-N
Formula:	C13H10O3
SMILES:	O=C(c1ccccc1O)c1ccccc1O
Mol. weight [g/mol]:	214.22
CAS:	835-11-0

Physical Properties

Property code	Value	Unit	Source
gf	-154.76	kJ/mol	Joback Method
hf	-305.79	kJ/mol	Joback Method
hfus	30.67	kJ/mol	Joback Method
hvap	81.86	kJ/mol	Joback Method
log10ws	-2.53		Crippen Method
logp	2.329		Crippen Method
mcvol	159.820	ml/mol	McGowan Method
pc	4802.50	kPa	Joback Method
tb	765.31	K	Joback Method
tc	1031.56	K	Joback Method
tf	562.48	K	Joback Method
vc	0.485	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	431.58	J/mol×K	765.31	Joback Method
cpg	442.67	J/mol×K	809.69	Joback Method
cpg	453.20	J/mol×K	854.06	Joback Method
cpg	463.41	J/mol×K	898.44	Joback Method
cpg	473.53	J/mol×K	942.81	Joback Method
cpg	483.79	J/mol×K	987.19	Joback Method
cpg	494.45	J/mol×K	1031.56	Joback Method

dvisc	0.0000259	Pa×s	562.48	Joback Method
dvisc	0.0000129	Pa×s	596.28	Joback Method
dvisc	0.0000070	Pa×s	630.09	Joback Method
dvisc	0.0000040	Pa×s	663.89	Joback Method
dvisc	0.0000024	Pa×s	697.70	Joback Method
dvisc	0.0000015	Pa×s	731.50	Joback Method
dvisc	0.0000010	Pa×s	765.31	Joback Method
hfust	20.07	kJ/mol	334.50	NIST Webbook

Sources

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=C835110&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hfust: Enthalpy of fusion at a given temperature
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

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