Methanone, (2-hydroxyphenyl)(4-hydroxyphenyl)-

Other names: Benzophenone, 2,4'-dihydroxy-
2,4'-Dihydroxybenzophenone
(2-Hydroxyphenyl)(4-hydroxyphenyl)methanone

Inchi: InChI=1S/C13H10O3/c14-10-7-5-9(6-8-10)13(16)11-3-1-2-4-12(11)15/h1-8,14-15H

InchiKey: HUYKZYIAFUBPAQ-UHFFFAOYSA-N

Formula: C13H10O3

SMILES: O=C(c1ccc(O)cc1)c1ccccc1O

Mol. weight [g/mol]: 214.22

CAS: 606-12-2

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

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=C606122&Units=SI

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
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