Methanone, bis(2-hydroxy-4-methoxyphenyl)-

Other names:	Benzophenone, 2,2'-dihydroxy-4,4'-dimethoxy-
	Benzophenone-6
	Cyasorb UV 12
	Uvinul D 49
	2,2'-Dihydroxy-4,4'-dimethoxybenzophenone
	4,4'-Dimethoxy-2,2'-dihydroxybenzophenone
	Bis(2-hydroxy-4-methoxyphenyl) methanone
Inchi:	InChI=1S/C15H14O5/c1-19-9-3-5-11(13(16)7-9)15(18)12-6-4-10(20-2)8-14(12)17/h3-8,1
InchiKey:	SODJJEXAWOSSON-UHFFFAOYSA-N
Formula:	C15H14O5
SMILES:	COc1ccc(C(=O)c2ccc(OC)cc2O)c(O)c1
Mol. weight [g/mol]:	274.27
CAS:	131-54-4

Physical Properties

Property code	Value	Unit	Source
gf	-367.18	kJ/mol	Joback Method
hf	-634.45	kJ/mol	Joback Method
hfus	37.45	kJ/mol	Joback Method
hvap	92.45	kJ/mol	Joback Method
log10ws	-2.77		Crippen Method
logp	2.346		Crippen Method
mcvol	199.740	ml/mol	McGowan Method
pc	3464.28	kPa	Joback Method
tb	865.87	K	Joback Method
tc	1114.48	K	Joback Method
tf	654.52	K	Joback Method
vc	0.633	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	583.15	J/mol×K	865.87	Joback Method
cpg	595.27	J/mol×K	907.31	Joback Method

cpg	606.92	J/mol×K	948.74	Joback Method
cpg	618.26	J/mol×K	990.18	Joback Method
cpg	629.42	J/mol×K	1031.61	Joback Method
cpg	640.52	J/mol×K	1073.05	Joback Method
cpg	651.72	J/mol×K	1114.48	Joback Method
dvisc	0.0000021	Pa×s	689.75	Joback Method
dvisc	0.0000037	Pa×s	654.52	Joback Method
dvisc	0.0000013	Pa×s	724.97	Joback Method
dvisc	0.0000008	Pa×s	760.19	Joback Method
dvisc	0.0000005	Pa×s	795.42	Joback Method
dvisc	0.0000004	Pa×s	830.64	Joback Method
dvisc	0.0000003	Pa×s	865.87	Joback Method
hfust	33.20	kJ/mol	412.30	NIST Webbook
hvapt	77.40	kJ/mol	451.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C131544&Units=SI
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

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
hvapt: Enthalpy of vaporization at a given temperature
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