Methanone, (2,4-dihydroxyphenyl)phenyl-

Other names:	(2,4-Dihydroxyphenyl)phenylmethanone
	2,4-Dihydroxybenzofenon
	2,4-dihydroxybenzophenone
	4-Benzoylresorcinol
	Acrylamide, n-[2-(dimethylamino)ethyl]-2,3-diphenyl-, monohydrochloride
	Advastab 48
	Benzophenone-1
	Benzoresorcinol
	Dastib 263
	Eastman inhibitor DHBP
	HHB
	Inhibitor DHBP
	NSC 38555
	Quinsorb 010
	Resbenzophenone
	Syntase 100
	UF 1
	USAF DO-28
	USAF ND-54
	UV 12
	Uvinol 400
	Uvinul 400
	Uvistat 12
	benzophenone, 2,4-dihydroxy-
Inchi:	InChI=1S/C13H10O3/c14-10-6-7-11(12(15)8-10)13(16)9-4-2-1-3-5-9/h1-8,14-15H
InchiKey:	ZXDDPOHVAMWLBH-UHFFFAOYSA-N
Formula:	C13H10O3
SMILES:	O=C(c1ccccc1)c1ccc(O)cc1O
Mol. weight [g/mol]:	214.22
CAS:	131-56-6

Physical Properties

Property code	Value	Unit	Source
chs	-6052.00 ± 1.90	kJ/mol	NIST Webbook
gf	-154.76	kJ/mol	Joback Method
hf	-305.79	kJ/mol	Joback Method

hfs	-492.80 ± 1.90	kJ/mol	NIST Webbook
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	483.79	J/mol×K	987.19	Joback Method
cpg	494.45	J/mol×K	1031.56	Joback Method
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
dvisc	0.0000010	Pa×s	765.31	Joback Method
dvisc	0.0000015	Pa×s	731.50	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
hsubt	134.00	kJ/mol	332.50	NIST Webbook
hvapt	87.10	kJ/mol	451.50	NIST Webbook

Sources

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=C131566&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Deduction of Physicochemical Properties from Solubilities:	https://www.doi.org/10.1021/je501140p
Solubilities of Polyhydroxybenzophenones in an Ethanol + Water Mixture from (293.15 to 343.15) K:	https://www.doi.org/10.1021/je800388y

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsubt:	Enthalpy of sublimation 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