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

Other names: Benzophenone, 2,4,4'-trihydroxy-
2,4-Dihydroxyphenyl p-hydroxybenzyl ketone
2,4,4'-Trihydroxybenzophenone

Inchi: InChI=1S/C13H10O4/c14-9-3-1-8(2-4-9)13(17)11-6-5-10(15)7-12(11)16/h1-7,14-16H

InchiKey: OKJFKPFBSPZTAH-UHFFFAOYSA-N

Formula: C13H10O4

SMILES: O=C(c1ccc(O)cc1)c1ccc(O)cc1O

Mol. weight [g/mol]: 230.22

CAS: 1470-79-7

Physical Properties

Property code	Value	Unit	Source
gf	-309.38	kJ/mol	Joback Method
hf	-483.10	kJ/mol	Joback Method
hfus	36.46	kJ/mol	Joback Method
hvap	94.87	kJ/mol	Joback Method
log10ws	-2.07		Crippen Method
logp	2.034		Crippen Method
mcvol	165.690	ml/mol	McGowan Method
pc	5972.16	kPa	Joback Method
tb	845.93	K	Joback Method
tc	1116.79	K	Joback Method
tf	674.20	K	Joback Method
vc	0.452	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	470.29	J/mol×K	845.93	Joback Method
cpg	481.19	J/mol×K	891.07	Joback Method
cpg	492.36	J/mol×K	936.22	Joback Method
cpg	504.13	J/mol×K	981.36	Joback Method
cpg	516.82	J/mol×K	1026.50	Joback Method
cpg	530.75	J/mol×K	1071.65	Joback Method

cpg	546.24	J/mol×K	1116.79	Joback Method
dvisc	0.0000005	Pa×s	674.20	Joback Method
dvisc	0.0000003	Pa×s	702.82	Joback Method
dvisc	0.0000002	Pa×s	731.44	Joback Method
dvisc	0.0000001	Pa×s	760.07	Joback Method
dvisc	6.7691086e-08	Pa×s	788.69	Joback Method
dvisc	4.4620809e-08	Pa×s	817.31	Joback Method
dvisc	3.0254579e-08	Pa×s	845.93	Joback Method
hfust	31.30	kJ/mol	482.60	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=C1470797&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