Ethanone, 1-(4-hydroxyphenyl)-2-phenyl-

Other names:	Acetophenone, 4'-hydroxy-2-phenyl-
	Benzyl p-hydroxyphenyl ketone
	4-Hydroxydeoxybenzoin
	4'-Hydroxy-2-phenylacetophenone
	p-(Phenylacetyl)phenol
	Benzyl 4-hydroxyphenyl ketone
	4-Hydroxydesoxybenzoin
	1-(4-Hydroxyphenyl)-2-phenylethanone
	NSC 60474
Inchi:	InChI=1S/C14H12O2/c15-13-8-6-12(7-9-13)14(16)10-11-4-2-1-3-5-11/h1-9,15H,10H2
InchiKey:	JBQTZLNCDIFCCO-UHFFFAOYSA-N
Formula:	C14H12O2
SMILES:	O=C(Cc1ccccc1)c1ccc(O)cc1
Mol. weight [g/mol]:	212.24
CAS:	2491-32-9

Physical Properties

Property code	Value	Unit	Source
gf	8.28	kJ/mol	Joback Method
hf	-149.12	kJ/mol	Joback Method
hfus	27.48	kJ/mol	Joback Method
hvap	71.07	kJ/mol	Joback Method
log10ws	-3.29		Crippen Method
logp	2.818		Crippen Method
mcvol	168.040	ml/mol	McGowan Method
pc	3509.58	kPa	Joback Method
tb	707.57	K	Joback Method
tc	961.85	K	Joback Method
tf	462.03	K	Joback Method
vc	0.576	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	439.93	J/mol×K	707.57	Joback Method
cpg	497.94	J/mol×K	919.47	Joback Method
cpg	487.85	J/mol×K	877.09	Joback Method
cpg	477.15	J/mol×K	834.71	Joback Method
cpg	465.70	J/mol×K	792.33	Joback Method
cpg	453.34	J/mol×K	749.95	Joback Method
cpg	507.58	J/mol×K	961.85	Joback Method
dvisc	0.0000168	Pa×s	707.57	Joback Method
dvisc	0.0000247	Pa×s	666.65	Joback Method
dvisc	0.0000383	Pa×s	625.72	Joback Method
dvisc	0.0000630	Pa×s	584.80	Joback Method
dvisc	0.0001118	Pa×s	543.88	Joback Method
dvisc	0.0002177	Pa×s	502.95	Joback Method
dvisc	0.0004769	Pa×s	462.03	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2491329&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
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