4'-Chloro-2-hydroxy-5-methylbenzophenone

Inchi: InChI=1S/C14H11ClO2/c1-9-2-7-13(16)12(8-9)14(17)10-3-5-11(15)6-4-10/h2-8,16H,1H3
InchiKey: GANGXBRARYTWTE-UHFFFAOYSA-N
Formula: C14H11ClO2
SMILES: Cc1ccc(O)c(C(=O)c2ccc(Cl)cc2)c1
Mol. weight [g/mol]: 246.69
CAS: 6279-05-6

Physical Properties

Property code	Value	Unit	Source
gf	-22.91	kJ/mol	Joback Method
hf	-187.80	kJ/mol	Joback Method
hfus	30.90	kJ/mol	Joback Method
hvap	76.78	kJ/mol	Joback Method
log10ws	-4.14		Crippen Method
logp	3.585		Crippen Method
mcvol	180.280	ml/mol	McGowan Method
pc	3246.73	kPa	Joback Method
tb	754.96	K	Joback Method
tc	1012.67	K	Joback Method
tf	516.99	K	Joback Method
vc	0.625	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	458.89	J/mol×K	754.96	Joback Method
cpg	470.89	J/mol×K	797.91	Joback Method
cpg	482.03	J/mol×K	840.86	Joback Method
cpg	492.46	J/mol×K	883.81	Joback Method
cpg	502.31	J/mol×K	926.76	Joback Method
cpg	511.73	J/mol×K	969.72	Joback Method
cpg	520.84	J/mol×K	1012.67	Joback Method
dvisc	0.0002044	Pa×s	516.99	Joback Method
dvisc	0.0001096	Pa×s	556.65	Joback Method

dvisc	0.0000638	Pa×s	596.31	Joback Method
dvisc	0.0000398	Pa×s	635.98	Joback Method
dvisc	0.0000262	Pa×s	675.64	Joback Method
dvisc	0.0000181	Pa×s	715.30	Joback Method
dvisc	0.0000130	Pa×s	754.96	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=C6279056&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