2',4'-Dichloro-2-hydroxy-5-methylbenzophenone

Inchi: InChI=1S/C14H10Cl2O2/c1-8-2-5-13(17)11(6-8)14(18)10-4-3-9(15)7-12(10)16/h2-7,17H,
InchiKey: UAFCYTVGWRWHCW-UHFFFAOYSA-N
Formula: C14H10Cl2O2
SMILES: Cc1ccc(O)c(C(=O)c2ccc(Cl)cc2Cl)c1
Mol. weight [g/mol]: 281.13
CAS: 92153-14-5

Physical Properties

Property code	Value	Unit	Source
gf	-44.47	kJ/mol	Joback Method
hf	-215.01	kJ/mol	Joback Method
hfus	34.71	kJ/mol	Joback Method
hvap	81.83	kJ/mol	Joback Method
log10ws	-4.82		Crippen Method
logp	4.238		Crippen Method
mcvol	192.520	ml/mol	McGowan Method
pc	3062.55	kPa	Joback Method
tb	797.37	K	Joback Method
tc	1057.37	K	Joback Method
tf	559.43	K	Joback Method
vc	0.673	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	477.50	J/mol×K	797.37	Joback Method
cpg	488.39	J/mol×K	840.70	Joback Method
cpg	498.58	J/mol×K	884.04	Joback Method
cpg	508.20	J/mol×K	927.37	Joback Method
cpg	517.38	J/mol×K	970.70	Joback Method
cpg	526.26	J/mol×K	1014.04	Joback Method
cpg	534.98	J/mol×K	1057.37	Joback Method
dvisc	0.0001217	Pa×s	559.43	Joback Method
dvisc	0.0000703	Pa×s	599.09	Joback Method

dvisc	0.0000434	Pa×s	638.74	Joback Method
dvisc	0.0000284	Pa×s	678.40	Joback Method
dvisc	0.0000195	Pa×s	718.06	Joback Method
dvisc	0.0000139	Pa×s	757.71	Joback Method
dvisc	0.0000102	Pa×s	797.37	Joback Method

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=C92153145&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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