4,4'-Dichlorobenzhydrol

Other names: Benzenemethanol, 4-chloro-«alpha»-(4-chlorophenyl)-
Methanol, bis-(p-chlorophenyl)-
4,4'-dichloro-«alpha»-phenylbenzylic alcohol
Inchi: InChI=1S/C13H10Cl2O/c14-11-5-1-9(2-6-11)13(16)10-3-7-12(15)8-4-10/h1-8,13,16H
InchiKey: PHUYGURFBULKPA-UHFFFAOYSA-N
Formula: C13H10Cl2O
SMILES: OC(c1ccc(Cl)cc1)c1ccc(Cl)cc1
Mol. weight [g/mol]: 253.12
CAS: 90-97-1

Physical Properties

Property code	Value	Unit	Source
gf	101.02	kJ/mol	Joback Method
hf	-50.52	kJ/mol	Joback Method
hfus	25.69	kJ/mol	Joback Method
hvap	75.47	kJ/mol	Joback Method
log10ws	-4.66		Crippen Method
logp	4.075		Crippen Method
mcvol	176.860	ml/mol	McGowan Method
pc	3059.17	kPa	Joback Method
tb	726.76	K	Joback Method
tc	962.34	K	Joback Method
tf	419.81	K	Joback Method
vc	0.658	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	422.90	J/mol×K	726.76	Joback Method
cpg	433.85	J/mol×K	766.02	Joback Method
cpg	443.90	J/mol×K	805.29	Joback Method
cpg	453.12	J/mol×K	844.55	Joback Method
cpg	461.56	J/mol×K	883.81	Joback Method
cpg	469.29	J/mol×K	923.07	Joback Method

cpg	476.38	J/mol×K	962.34	Joback Method
dvisc	0.0014138	Pa×s	419.81	Joback Method
dvisc	0.0005572	Pa×s	470.97	Joback Method
dvisc	0.0002635	Pa×s	522.13	Joback Method
dvisc	0.0001425	Pa×s	573.29	Joback Method
dvisc	0.0000852	Pa×s	624.44	Joback Method
dvisc	0.0000551	Pa×s	675.60	Joback Method
dvisc	0.0000378	Pa×s	726.76	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C90971&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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