Dichlorophen

Other names:

2,2'-Dihydroxy-5,5'-dichlorodiphenylmethane
2,2'-Methylenebis[4-chlorophenol]
4,4'-Dichloro-2,2'-methylenediphenol
4-chloro-2-[(5-chloro-2-hydroxyphenyl)methyl]phenol
5,5'-Dichloro-2,2'-dihydroxydiphenylmethane
Acticide DDM
Algafen
Algofen
Anthipen
Anthiphen
Antifen
Antiphen
Bis(2-hydroxy-5-chlorophenyl)methane
Bis(5-chlor-2-hydroxyphenyl)-methan
Bis(5-chloro-2-hydroxyphenyl)methane
Bis(chlorohydroxyphenyl)methane
Bis-2-hydroxy-5-chlorfenylmethan
Cordocel
DDDM
DDM
Di-(5-chloro-2-hydroxyphenyl)methane
Dicestal
Dichloorfeen
Dichlorofen
Dichlorofen (Czech)
Dichlorophen B
Dichlorophene
Dichlorophene 10
Dichlorphen
Didroxan
Didroxane
Difentan
Diphentane 70
Diphenthane 70
Embephen
Fungicide FX
Fungicide GM
Fungicide M
G 4
G-4 Pure

G-4 Technical
GH
Gefir
Gingivit
Giv Gard G 4-40
Halenol
Hyosan
Korium
Methanedichlorofen
Nuophene
O,O-Methyleen-bis-(4-chloorfenol)
O,O-Metilen-bis(4-cloro-fenolo)
Palacel
Panacide
Parabis
Phenol, 2,2'-methylenebis[4-chloro-
Plath-Lyse
Prevental
Preventol
Preventol GD
Preventol GDC
Sandocide
Super mosstox
Taeniatol
Teniathane
Teniatol
Teniotol
Trivex
Vermithana
Wespuril
Westpuril

Inchi: InChI=1S/C13H10Cl2O2/c14-10-1-3-12(16)8(6-10)5-9-7-11(15)2-4-13(9)17/h1-4,6-7,16-1
InchiKey: MDNWOSOZYLHTCG-UHFFFAOYSA-N
Formula: C13H10Cl2O2
SMILES: Oc1ccc(Cl)cc1Cc1cc(Cl)ccc1O
Mol. weight [g/mol]: 269.12
CAS: 97-23-4

Physical Properties

Property code	Value	Unit	Source

gf	-68.96	kJ/mol	Joback Method
hf	-247.63	kJ/mol	Joback Method
hfus	36.69	kJ/mol	Joback Method
hvap	85.21	kJ/mol	Joback Method
log10ws	-3.95		Aqueous Solubility Prediction Method
log10ws	-3.95		Estimated Solubility Method
logp	3.995		Crippen Method
mcvol	182.730	ml/mol	McGowan Method
pc	3857.88	kPa	Joback Method
rinpol	2140.00		NIST Webbook
rinpol	2140.00		NIST Webbook
tb	796.26	K	Joback Method
tc	1062.51	K	Joback Method
tf	446.98	K	Aqueous Solubility Prediction Method
vc	0.578	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	460.57	J/mol×K	796.26	Joback Method
cpg	471.20	J/mol×K	840.64	Joback Method
cpg	481.50	J/mol×K	885.01	Joback Method
cpg	491.70	J/mol×K	929.39	Joback Method
cpg	502.01	J/mol×K	973.76	Joback Method
cpg	512.67	J/mol×K	1018.14	Joback Method
cpg	523.91	J/mol×K	1062.51	Joback Method
dvisc	0.0000123	Pa×s	597.43	Joback Method
dvisc	0.0000067	Pa×s	630.57	Joback Method
dvisc	0.0000039	Pa×s	663.71	Joback Method
dvisc	0.0000024	Pa×s	696.85	Joback Method
dvisc	0.0000015	Pa×s	729.98	Joback Method
dvisc	0.0000010	Pa×s	763.12	Joback Method
dvisc	0.0000007	Pa×s	796.26	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C97234&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume