Ethane, 1,1-bis(p-chlorophenyl)-

Other names:	2,2-Bis(p-chlorophenyl)ethane
	DDE
	p,p'-Dichlorodiphenyl ethane
	Benzene, 1,1'-ethylidenebis[4-chloro-
	1,1-Bis(4-chlorophenyl)ethane
	Ethane, 1,1-bis(4-chlorophenyl)-
Inchi:	InChI=1S/C14H12Cl2/c1-10(11-2-6-13(15)7-3-11)12-4-8-14(16)9-5-12/h2-10H,1H3
InchiKey:	KTEARTXATWOYDB-UHFFFAOYSA-N
Formula:	C14H12Cl2
SMILES:	CC(c1ccc(Cl)cc1)c1ccc(Cl)cc1
Mol. weight [g/mol]:	251.15
CAS:	3547-04-4

Physical Properties

Property code	Value	Unit	Source
gf	246.26	kJ/mol	Joback Method
hf	81.07	kJ/mol	Joback Method
hfus	24.19	kJ/mol	Joback Method
hvap	61.02	kJ/mol	Joback Method
log10ws	-5.32		Crippen Method
logp	5.145		Crippen Method
mcvol	185.080	ml/mol	McGowan Method
pc	2510.03	kPa	Joback Method
rinpol	1950.00		NIST Webbook
tb	657.46	K	Joback Method
tc	910.84	K	Joback Method
tf	370.26	K	Joback Method
vc	0.696	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	425.34	J/mol×K	657.46	Joback Method
cpg	488.45	J/mol×K	868.61	Joback Method

cpg	477.97	J/mol×K	826.38	Joback Method
cpg	466.50	J/mol×K	784.15	Joback Method
cpg	453.96	J/mol×K	741.92	Joback Method
cpg	440.27	J/mol×K	699.69	Joback Method
cpg	498.01	J/mol×K	910.84	Joback Method
dvisc	0.0001504	Pa×s	657.46	Joback Method
dvisc	0.0001904	Pa×s	609.59	Joback Method
dvisc	0.0002508	Pa×s	561.73	Joback Method
dvisc	0.0003479	Pa×s	513.86	Joback Method
dvisc	0.0005162	Pa×s	465.99	Joback Method
dvisc	0.0008383	Pa×s	418.13	Joback Method
dvisc	0.0015430	Pa×s	370.26	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=C3547044&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume