1-Chloro-2,2-Bis(p-chlorophenyl)ethane

Other names:	Benzene, 1,1'-(2-chloroethylidene)bis-4-chloro-
	Ethane, 2-chloro-1,1-bis(p-chlorophenyl)-
	p,p'-DDMS
	DDM
	DDMS
	1,1-Bis(p-chlorophenyl)-2-chloroethane
	Ethane, 2,2-bis(p-chlorophenyl)-1-chloro-
	2,2-Bis(p-chlorophenyl)-1-monochloroethane
Inchi:	InChI=1S/C14H11Cl3/c15-9-14(10-1-5-12(16)6-2-10)11-3-7-13(17)8-4-11/h1-8,14H,9H2
InchiKey:	CHBOSHOWERDCMH-UHFFFAOYSA-N
Formula:	C14H11Cl3
SMILES:	ClCC(c1ccc(Cl)cc1)c1ccc(Cl)cc1
Mol. weight [g/mol]:	285.60
CAS:	2642-80-0

Physical Properties

Property code	Value	Unit	Source
gf	234.33	kJ/mol	Joback Method
hf	65.33	kJ/mol	Joback Method
hfus	28.39	kJ/mol	Joback Method
hvap	65.40	kJ/mol	Joback Method
log10ws	-5.48		Crippen Method
logp	5.364		Crippen Method
mcvol	197.320	ml/mol	McGowan Method
pc	2419.50	kPa	Joback Method
rinpol	2168.00		NIST Webbook
rinpol	2168.00		NIST Webbook
tb	694.89	K	Joback Method
tc	950.58	K	Joback Method
tf	400.18	K	Joback Method
vc	0.745	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	449.41	J/mol×K	694.89	Joback Method
cpg	462.99	J/mol×K	737.51	Joback Method
cpg	475.39	J/mol×K	780.12	Joback Method
cpg	486.70	J/mol×K	822.74	Joback Method
cpg	496.99	J/mol×K	865.35	Joback Method
cpg	506.35	J/mol×K	907.97	Joback Method
cpg	514.88	J/mol×K	950.58	Joback Method
dvisc	0.0013470	Pa×s	400.18	Joback Method
dvisc	0.0007497	Pa×s	449.30	Joback Method
dvisc	0.0004684	Pa×s	498.42	Joback Method
dvisc	0.0003184	Pa×s	547.54	Joback Method
dvisc	0.0002306	Pa×s	596.65	Joback Method
dvisc	0.0001755	Pa×s	645.77	Joback Method
dvisc	0.0001387	Pa×s	694.89	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=C2642800&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume