Methane, bis(p-chlorophenyl)-

Other names:	Benzene, 1,1'-methylenebis[4-chloro- p,p'-Dichlorodiphenylmethane Bis(p-chlorophenyl)methane DBM (the methane derivative) 4,4'-Dichlorodiphenylmethane Bis-(4-chlorophenyl)-methane Di(p-chlorophenyl)methane Di(4-chlorophenyl)methane DDM Methane, bis(4-chlorophenyl)- Diphenylmethane, 4,4'-dichloro 1,1'-Methylenebis(4-chlorobenzene) NSC 406594
Inchi:	InChI=1S/C13H10Cl2/c14-12-5-1-10(2-6-12)9-11-3-7-13(15)8-4-11/h1-8H,9H2
InchiKey:	LQGSWLJZAKVBJH-UHFFFAOYSA-N
Formula:	C13H10Cl2
SMILES:	Clc1ccc(Cc2ccc(Cl)cc2)cc1
Mol. weight [g/mol]:	237.12
CAS:	101-76-8

Physical Properties

Property code	Value	Unit	Source
gf	240.28	kJ/mol	Joback Method
hf	106.99	kJ/mol	Joback Method
hfus	25.12	kJ/mol	Joback Method
hvap	59.18	kJ/mol	Joback Method
log10ws	-4.94		Crippen Method
logp	4.584		Crippen Method
mcvol	170.990	ml/mol	McGowan Method
pc	2746.90	kPa	Joback Method
rinpol	310.50		NIST Webbook
tb	635.02	K	Joback Method
tc	888.72	K	Joback Method
tf	373.99	K	Joback Method
vc	0.645	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.70	J/mol×K	635.02	Joback Method
cpg	434.59	J/mol×K	846.44	Joback Method
cpg	424.82	J/mol×K	804.15	Joback Method
cpg	414.12	J/mol×K	761.87	Joback Method
cpg	402.41	J/mol×K	719.59	Joback Method
cpg	389.63	J/mol×K	677.30	Joback Method
cpg	443.50	J/mol×K	888.72	Joback Method
dvisc	0.0001789	Pa×s	635.02	Joback Method
dvisc	0.0002215	Pa×s	591.51	Joback Method
dvisc	0.0002836	Pa×s	548.01	Joback Method
dvisc	0.0003789	Pa×s	504.50	Joback Method
dvisc	0.0005347	Pa×s	461.00	Joback Method
dvisc	0.0008107	Pa×s	417.50	Joback Method
dvisc	0.0013542	Pa×s	373.99	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=C101768&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