Benzene, 1,1'-(dichloromethylene)bis-

Other names:	Methane, dichlorodiphenyl- (Dichloro)diphenylmethane Benzophenone dichloride Diphenyldichloromethane DPM DPM (Halocarbon) «alpha»,«alpha»-Dichlorodiphenylmethane NSC 37425
Inchi:	InChI=1S/C13H10Cl2/c14-13(15,11-7-3-1-4-8-11)12-9-5-2-6-10-12/h1-10H
InchiKey:	OPTDDWCXQQYKGU-UHFFFAOYSA-N
Formula:	C13H10Cl2
SMILES:	ClC(Cl)(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	237.12
CAS:	2051-90-3

Physical Properties

Property code	Value	Unit	Source
gf	262.38	kJ/mol	Joback Method
hf	121.18	kJ/mol	Joback Method
hfus	18.49	kJ/mol	Joback Method
hvap	56.56	kJ/mol	Joback Method
log10ws	-4.54		Crippen Method
logp	4.365		Crippen Method
mcvol	170.990	ml/mol	McGowan Method
pc	2893.62	kPa	Joback Method
tb	578.20	K	NIST Webbook
tc	890.45	K	Joback Method
tf	351.37	K	Joback Method
vc	0.634	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	381.25	J/mol×K	621.83	Joback Method

cpg	396.46	J/mol×K	666.60	Joback Method
cpg	410.11	J/mol×K	711.37	Joback Method
cpg	422.35	J/mol×K	756.14	Joback Method
cpg	433.34	J/mol×K	800.91	Joback Method
cpg	443.22	J/mol×K	845.68	Joback Method
cpg	452.16	J/mol×K	890.45	Joback Method
dvisc	0.0023978	Pa×s	351.37	Joback Method
dvisc	0.0011825	Pa×s	396.45	Joback Method
dvisc	0.0006737	Pa×s	441.52	Joback Method
dvisc	0.0004260	Pa×s	486.60	Joback Method
dvisc	0.0002912	Pa×s	531.68	Joback Method
dvisc	0.0002112	Pa×s	576.75	Joback Method
dvisc	0.0001605	Pa×s	621.83	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	447.00	K	2.40	NIST Webbook

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=C2051903&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
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume