1,1'-Biphenyl, 4-(chloromethyl)-

Other names:	Biphenyl, 4-(chloromethyl)-
	4-(Chloromethyl)biphenyl
	4CMB
	p-Phenylbenzyl Chloride
	4-Phenylbenzyl chloride
Inchi:	InChI=1S/C13H11Cl/c14-10-11-6-8-13(9-7-11)12-4-2-1-3-5-12/h1-9H,10H2
InchiKey:	HLQZCRVEEQKNMS-UHFFFAOYSA-N
Formula:	C13H11Cl
SMILES:	ClCc1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]:	202.68
CAS:	1667-11-4

Physical Properties

Property code	Value	Unit	Source
gf	261.84	kJ/mol	Joback Method
hf	134.20	kJ/mol	Joback Method
hfus	21.32	kJ/mol	Joback Method
hvap	54.13	kJ/mol	Joback Method
log10ws	-5.11		Crippen Method
logp	4.092		Crippen Method
mcvol	158.750	ml/mol	McGowan Method
pc	2902.98	kPa	Joback Method
tb	592.61	K	Joback Method
tc	842.20	K	Joback Method
tf	331.55	K	Joback Method
vc	0.597	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.47	J/mol×K	592.61	Joback Method
cpg	417.22	J/mol×K	800.61	Joback Method
cpg	406.25	J/mol×K	759.01	Joback Method
cpg	394.27	J/mol×K	717.41	Joback Method

cpg	381.19	J/mol×K	675.81	Joback Method
cpg	366.95	J/mol×K	634.21	Joback Method
cpg	427.26	J/mol×K	842.20	Joback Method
dvisc	0.0001877	Pa×s	592.61	Joback Method
dvisc	0.0002363	Pa×s	549.10	Joback Method
dvisc	0.0003095	Pa×s	505.59	Joback Method
dvisc	0.0004265	Pa×s	462.08	Joback Method
dvisc	0.0006282	Pa×s	418.57	Joback Method
dvisc	0.0010122	Pa×s	375.06	Joback Method
dvisc	0.0018486	Pa×s	331.55	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=C1667114&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume