2-Chlorodiphenylmethane

Other names: 1-Benzyl-2-chlorobenzene
Diphenylmethane, 2-chloro
Inchi: InChI=1S/C13H11Cl/c14-13-9-5-4-8-12(13)10-11-6-2-1-3-7-11/h1-9H,10H2
InchiKey: IKKSPFNZXBWDQA-UHFFFAOYSA-N
Formula: C13H11Cl
SMILES: Clc1ccccc1Cc1ccccc1
Mol. weight [g/mol]: 202.68
CAS: 29921-41-3

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	-4.26		Crippen Method
logp	3.931		Crippen Method
mcvol	158.750	ml/mol	McGowan Method
pc	2902.98	kPa	Joback Method
rinpol	272.20		NIST Webbook
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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

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=C29921413&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