Benzene, 1-chloro-4-(chlorophenylmethyl)-

Other names:	Methane, chloro(p-chlorophenyl)phenyl- p-Chlorobenzhydryl chloride Chloro(p-chlorophenyl)phenylmethane 4-Chlorobenzhydryl chloride Chloro(4-chlorophenyl)phenylmethane «alpha»,4-dichloro-«alpha»-phenyltoluene
Inchi:	InChI=1S/C13H10Cl2/c14-12-8-6-11(7-9-12)13(15)10-4-2-1-3-5-10/h1-9,13H
InchiKey:	ALKWTKGPKKAZMN-UHFFFAOYSA-N
Formula:	C13H10Cl2
SMILES:	Clc1ccc(C(Cl)c2ccccc2)cc1
Mol. weight [g/mol]:	237.12
CAS:	134-83-8

Physical Properties

Property code	Value	Unit	Source
gf	247.47	kJ/mol	Joback Method
hf	113.18	kJ/mol	Joback Method
hfus	21.99	kJ/mol	Joback Method
hvap	58.13	kJ/mol	Joback Method
log10ws	-4.87		Crippen Method
logp	4.668		Crippen Method
mcvol	170.990	ml/mol	McGowan Method
pc	2814.34	kPa	Joback Method
rinpol	1788.00		NIST Webbook
rinpol	1788.00		NIST Webbook
tb	629.60	K	Joback Method
tc	888.06	K	Joback Method
tf	346.47	K	Joback Method
vc	0.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	377.27	J/mol×K	629.60	Joback Method

cpg	391.82	J/mol×K	672.68	Joback Method
cpg	405.09	J/mol×K	715.75	Joback Method
cpg	417.17	J/mol×K	758.83	Joback Method
cpg	428.15	J/mol×K	801.91	Joback Method
cpg	438.12	J/mol×K	844.98	Joback Method
cpg	447.16	J/mol×K	888.06	Joback Method
dvisc	0.0020615	Pa×s	346.47	Joback Method
dvisc	0.0010571	Pa×s	393.66	Joback Method
dvisc	0.0006254	Pa×s	440.85	Joback Method
dvisc	0.0004095	Pa×s	488.04	Joback Method
dvisc	0.0002889	Pa×s	535.22	Joback Method
dvisc	0.0002157	Pa×s	582.41	Joback Method
dvisc	0.0001682	Pa×s	629.60	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	432.70	K	0.30	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=C134838&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume