

3-Chlorodiphenylmethane

Inchi:	InChI=1S/C13H11Cl/c14-13-8-4-7-12(10-13)9-11-5-2-1-3-6-11/h1-8,10H,9H2
InchiKey:	JEOITUQBPRYRG-UHFFFAOYSA-N
Formula:	C13H11Cl
SMILES:	Clc1cccc(Cc2ccccc2)c1
Mol. weight [g/mol]:	202.68
CAS:	27798-38-5

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
tb	592.61	K	Joback Method
tc	842.20	K	Joback Method
tf	331.55	K	Joback Method
vc	0.597	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.47	J/molxK	592.61	Joback Method
cpg	366.95	J/molxK	634.21	Joback Method
cpg	381.19	J/molxK	675.81	Joback Method
cpg	394.27	J/molxK	717.41	Joback Method
cpg	406.25	J/molxK	759.01	Joback Method
cpg	417.22	J/molxK	800.61	Joback Method
cpg	427.26	J/molxK	842.20	Joback Method
dvisc	0.0018486	Paxs	331.55	Joback Method
dvisc	0.0010122	Paxs	375.06	Joback Method

dvisc	0.0006282	Paxs	418.57	Joback Method
dvisc	0.0004265	Paxs	462.08	Joback Method
dvisc	0.0003095	Paxs	505.59	Joback Method
dvisc	0.0002363	Paxs	549.10	Joback Method
dvisc	0.0001877	Paxs	592.61	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C27798385&Units=SI
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

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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