2',3,4,4'-tetrachloro-6-methyl-diphenylmethane

Inchi: InChI=1S/C14H10Cl4/c1-8-4-13(17)14(18)6-10(8)5-9-2-3-11(15)7-12(9)16/h2-4,6-7H,5H2
InchiKey: OKBPQVXEXVYBGB-UHFFFAOYSA-N
Formula: C14H10Cl4
SMILES: Cc1cc(Cl)c(Cl)cc1Cc1ccc(Cl)cc1Cl
Mol. weight [g/mol]: 320.04

Physical Properties

Property code	Value	Unit	Source
gf	195.95	kJ/mol	Joback Method
hf	20.46	kJ/mol	Joback Method
hfus	34.94	kJ/mol	Joback Method
hvap	72.16	kJ/mol	Joback Method
log10ws	-6.79		Crippen Method
logp	6.199		Crippen Method
mcvol	209.560	ml/mol	McGowan Method
pc	2218.71	kPa	Joback Method
rinpol	2203.60		NIST Webbook
rinpol	2203.60		NIST Webbook
rinpol	2215.50		NIST Webbook
tb	747.70	K	Joback Method
tc	1002.50	K	Joback Method
tf	482.66	K	Joback Method
vc	0.799	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	466.32	J/mol×K	747.70	Joback Method
cpg	477.97	J/mol×K	790.17	Joback Method
cpg	488.65	J/mol×K	832.63	Joback Method
cpg	498.43	J/mol×K	875.10	Joback Method
cpg	507.35	J/mol×K	917.56	Joback Method
cpg	515.47	J/mol×K	960.03	Joback Method
cpg	522.84	J/mol×K	1002.50	Joback Method

dvisc	0.0006543	Pa×s	482.66	Joback Method
dvisc	0.0004524	Pa×s	526.83	Joback Method
dvisc	0.0003312	Pa×s	571.01	Joback Method
dvisc	0.0002535	Pa×s	615.18	Joback Method
dvisc	0.0002012	Pa×s	659.35	Joback Method
dvisc	0.0001643	Pa×s	703.53	Joback Method
dvisc	0.0001375	Pa×s	747.70	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R181125&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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