Dienochlor

Other names:	1,1',2,2',3,3',4,4',5,5'-Decachlorobi-2,4-cyclopentadien-1-yl
	1,2,3,4,5-pentachloro-5-(1,2,3,4,5-pentachloro-1-cyclopenta-2,4-dienyl)cyclopenta-1,3-die
	Bi-2,4-cyclopentadien-1-yl, 1,1',2,2',3,3',4,4',5,5'-decachloro-
	Bi-2,4-cyclopentadien-1-yl, decachloro-
	Bis(pentachlor-2,4-cyclopentadien-1-yl)
	Bis(pentachloro-2,4-cyclopentadien-1-yl)
	Bis(pentachlorocyclopentadienyl)
	Decachlor
	Decachlorobi-2,4-cyclopentadien-1-yl
	Decachlorobi-2,4-cyclopentadiene-1-yl
	Decachlorobis(2,4-cyclopentadiene-1-yl)
	Dienochlore
	ENT 25,718
	HRS 16
	HRS 1654
	HRS 16A
	Hooker HRS 1654
	Hooker HRS-16
	NSC 26106
	NSC 41880
	Pentac
	Pentac SP
	Pentac WP
	Pentac aquaflow
Inchi:	InChI=1S/C10Cl10/c11-1-2(12)6(16)9(19,5(1)15)10(20)7(17)3(13)4(14)8(10)18
InchiKey:	LWLJUMBEZJHXHV-UHFFFAOYSA-N
Formula:	C10Cl10
SMILES:	ClC1=C(Cl)C(Cl)(C2(Cl)C(Cl)=C(Cl)C(Cl)=C2Cl)C(Cl)=C1Cl
Mol. weight [g/mol]:	474.64
CAS:	2227-17-0

Physical Properties

Property code	Value	Unit	Source
gf	18.94	kJ/mol	Joback Method
hf	-116.33	kJ/mol	Joback Method
hfus	40.68	kJ/mol	Joback Method

hvap	86.38	kJ/mol	Joback Method
log10ws	-7.28		Aqueous Solubility Prediction Method
log10ws	-7.28		Estimated Solubility Method
logp	7.726		Crippen Method
mcvol	235.240	ml/mol	McGowan Method
pc	2324.78	kPa	Joback Method
tb	870.02	K	Joback Method
tc	1157.04	K	Joback Method
tf	674.46	K	Joback Method
vc	0.907	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	416.13	J/mol×K	870.02	Joback Method
cpg	426.64	J/mol×K	917.86	Joback Method
cpg	439.17	J/mol×K	965.69	Joback Method
cpg	454.20	J/mol×K	1013.53	Joback Method
cpg	472.16	J/mol×K	1061.37	Joback Method
cpg	493.52	J/mol×K	1109.21	Joback Method
cpg	518.72	J/mol×K	1157.04	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2227170&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Joback Method: https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Estimated Solubility Method: http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

Legend

cpg: Ideal gas heat capacity

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