Benzene, pentachloro(trichloroethenyl)-

Other names:	Octachlorostyrene
	Perchlorostyrene
	Styrene, octachloro-
	Trichlorovinylpentachlorobenzene
Inchi:	InChI=1S/C8Cl8/c9-2-1(4(11)8(15)16)3(10)6(13)7(14)5(2)12
InchiKey:	RUYUCCQRWINUHE-UHFFFAOYSA-N
Formula:	C8Cl8
SMILES:	ClC(Cl)=C(Cl)c1c(Cl)c(Cl)c(Cl)c(Cl)c1Cl
Mol. weight [g/mol]:	379.71
CAS:	29082-74-4

Physical Properties

Property code	Value	Unit	Source
gf	48.42	kJ/mol	Joback Method
hf	-57.55	kJ/mol	Joback Method
hfus	39.73	kJ/mol	Joback Method
hvap	74.19	kJ/mol	Joback Method
log10ws	-7.66		Crippen Method
logp	7.296		Crippen Method
mcvol	193.440	ml/mol	McGowan Method
pc	2592.49	kPa	Joback Method
tb	737.38	K	Joback Method
tc	1005.82	K	Joback Method
tf	475.30	K	Joback Method
vc	0.750	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	311.25	J/mol×K	737.38	Joback Method
cpg	315.86	J/mol×K	782.12	Joback Method
cpg	320.06	J/mol×K	826.86	Joback Method
cpg	323.88	J/mol×K	871.60	Joback Method
cpg	327.41	J/mol×K	916.34	Joback Method

cpg	330.68	J/mol×K	961.08	Joback Method
cpg	333.76	J/mol×K	1005.82	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C29082744&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
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