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

Other names:	4-Chloro-«alpha»-methylstyrene
	p-Chloro-«alpha»-methylstyrene
	4-ClC6H4C(CH3)=CH2
	1-Chloro-4-isopropenylbenzene
Inchi:	InChI=1S/C9H9Cl/c1-7(2)8-3-5-9(10)6-4-8/h3-6H,1H2,2H3
InchiKey:	WQDGTJOEMPEHHL-UHFFFAOYSA-N
Formula:	C9H9Cl
SMILES:	C=C(C)c1ccc(Cl)cc1
Mol. weight [g/mol]:	152.62
CAS:	1712-70-5

Physical Properties

Property code	Value	Unit	Source
affp	854.30	kJ/mol	NIST Webbook
basg	825.40	kJ/mol	NIST Webbook
gf	195.04	kJ/mol	Joback Method
hf	95.87	kJ/mol	Joback Method
hfus	14.33	kJ/mol	Joback Method
hvap	42.36	kJ/mol	Joback Method
log10ws	-3.40		Crippen Method
logp	3.373		Crippen Method
mcvol	121.850	ml/mol	McGowan Method
pc	3243.03	kPa	Joback Method
rinpol	1146.00		NIST Webbook
tb	470.97	K	Joback Method
tc	695.36	K	Joback Method
tf	244.33	K	Joback Method
vc	0.463	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	225.88	J/mol×K	470.97	Joback Method
cpg	238.27	J/mol×K	508.37	Joback Method

cpg	249.85	J/mol×K	545.77	Joback Method
cpg	260.68	J/mol×K	583.16	Joback Method
cpg	270.79	J/mol×K	620.56	Joback Method
cpg	280.21	J/mol×K	657.96	Joback Method
cpg	288.99	J/mol×K	695.36	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1712705&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

affp:	Proton affinity
basg:	Gas basicity
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume