«alpha»,«alpha»,«alpha»',«alpha»'-Tetrachloro-o-x

Other names: Benzene, 1,2-bis(dichloromethyl)-
1,2-Bis(dichloromethyl)benzene
alpha,alpha,alpha',alpha'-Tetrachloro-o-xylene
Inchi: InChI=1S/C8H6Cl4/c9-7(10)5-3-1-2-4-6(5)8(11)12/h1-4,7-8H
InchiKey: UFJYKWQUTDGGPV-UHFFFAOYSA-N
Formula: C8H6Cl4
SMILES: ClC(Cl)c1ccccc1C(Cl)Cl
Mol. weight [g/mol]: 243.94
CAS: 25641-99-0

Physical Properties

Property code	Value	Unit	Source
gf	66.66	kJ/mol	Joback Method
hf	-56.91	kJ/mol	Joback Method
hfus	19.87	kJ/mol	Joback Method
hvap	53.10	kJ/mol	Joback Method
log10ws	-4.76		Crippen Method
logp	4.639		Crippen Method
mcvol	148.780	ml/mol	McGowan Method
pc	3079.57	kPa	Joback Method
tb	546.50 ± 0.50	K	NIST Webbook
tc	807.80	K	Joback Method
tf	363.00	K	NIST Webbook
vc	0.559	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	272.66	J/mol×K	562.94	Joback Method
cpg	315.06	J/mol×K	766.99	Joback Method
cpg	308.03	J/mol×K	726.18	Joback Method
cpg	300.32	J/mol×K	685.37	Joback Method
cpg	291.89	J/mol×K	644.56	Joback Method
cpg	282.69	J/mol×K	603.75	Joback Method

cpg	321.46	J/mol×K	807.80	Joback Method
dvisc	0.0002337	Pa×s	562.94	Joback Method
dvisc	0.0003035	Pa×s	520.54	Joback Method
dvisc	0.0004129	Pa×s	478.14	Joback Method
dvisc	0.0005964	Pa×s	435.74	Joback Method
dvisc	0.0009326	Pa×s	393.34	Joback Method
dvisc	0.0016244	Pa×s	350.94	Joback Method
dvisc	0.0032959	Pa×s	308.54	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C25641990&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume