Sulfoxide, bis(p-chlorophenyl)

Other names:	Benzene, 1,1'-sulfinylbis[4-chloro- p-Chlorophenyl sulfoxide p,p'-Dichlorodiphenyl sulfoxide Bis(p-chlorophenyl) sulfoxide Bis(4-chlorophenyl) sulfoxide Di-p-chlorophenyl sulfoxide 4,4'-Dichlorodiphenyl sulfoxide 4,4-Dichlorodiphenyl sulfoxide Sulfoxide, bis(4-chlorophenyl)- NSC 406205 4-Chlorophenyl sulfoxide bis(p-chlorophenyl)sulphoxide
Inchi:	InChI=1S/C12H8Cl2OS/c13-9-1-5-11(6-2-9)16(15)12-7-3-10(14)4-8-12/h1-8H
InchiKey:	KJGYFISADIZFEL-UHFFFAOYSA-N
Formula:	C12H8Cl2OS
SMILES:	O=S(c1ccc(Cl)cc1)c1ccc(Cl)cc1
Mol. weight [g/mol]:	271.16
CAS:	3085-42-5

Physical Properties

Property code	Value	Unit	Source
gf	14.15	kJ/mol	Joback Method
hf	-78.11	kJ/mol	Joback Method
hfus	30.29	kJ/mol	Joback Method
hvap	69.68	kJ/mol	Joback Method
log10ws	-4.01		Crippen Method
logp	4.160		Crippen Method
mcvol	179.120	ml/mol	McGowan Method
pc	3356.75	kPa	Joback Method
tb	670.42	K	Joback Method
tc	932.24	K	Joback Method
tf	399.20	K	Joback Method
vc	0.679	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	391.42	J/mol×K	670.42	Joback Method
cpg	404.14	J/mol×K	714.06	Joback Method
cpg	415.63	J/mol×K	757.69	Joback Method
cpg	425.96	J/mol×K	801.33	Joback Method
cpg	435.18	J/mol×K	844.97	Joback Method
cpg	443.35	J/mol×K	888.60	Joback Method
cpg	450.50	J/mol×K	932.24	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3085425&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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