4,4'-Dichlorodiphenylsulphide

Other names:	Sulfide, bis(p-chlorophenyl)
	p-Chlorophenyl sulfide
	Bis(p-chlorophenyl) sulfide
	Bis(4-chlorophenyl) sulfide
	Di-p-chlorophenyl sulfide
	4,4'-Dichlorodiphenyl sulfide
	Benzene, 1,1'-thiobis(4-chloro-
	4-Chlorophenyl sulfide
	NSC 40470
Inchi:	InChI=1S/C12H8Cl2S/c13-9-1-5-11(6-2-9)15-12-7-3-10(14)4-8-12/h1-8H
InchiKey:	MJEPOVIWHVRBIT-UHFFFAOYSA-N
Formula:	C12H8Cl2S
SMILES:	Clc1ccc(Sc2ccc(Cl)cc2)cc1
Mol. weight [g/mol]:	255.16
CAS:	5181-10-2

Physical Properties

Property code	Value	Unit	Source
gf	264.98	kJ/mol	Joback Method
hf	169.50	kJ/mol	Joback Method
hfus	26.66	kJ/mol	Joback Method
hvap	63.77	kJ/mol	Joback Method
log10ws	-5.26		Crippen Method
logp	5.145		Crippen Method
mcvol	173.250	ml/mol	McGowan Method
pc	3103.64	kPa	Joback Method
tb	680.92	K	Joback Method
tc	959.03	K	Joback Method
tf	397.12	K	Joback Method
vc	0.643	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	374.16	J/mol×K	680.92	Joback Method
cpg	386.80	J/mol×K	727.27	Joback Method
cpg	398.19	J/mol×K	773.62	Joback Method
cpg	408.42	J/mol×K	819.98	Joback Method
cpg	417.55	J/mol×K	866.33	Joback Method
cpg	425.66	J/mol×K	912.68	Joback Method
cpg	432.82	J/mol×K	959.03	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5181102&Units=SI

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