7-methyl-2,3-dichlorodibenzodioxin

Inchi: InChI=1S/C13H8Cl2O2/c1-7-2-3-10-11(4-7)17-13-6-9(15)8(14)5-12(13)16-10/h2-6H,1H3
InchiKey: MNPDMSZHAQPWDL-UHFFFAOYSA-N
Formula: C13H8Cl2O2
SMILES: Cc1ccc2c(c1)Oc1cc(Cl)c(Cl)cc1O2
Mol. weight [g/mol]: 267.11

Physical Properties

Property code	Value	Unit	Source
gf	119.71	kJ/mol	Joback Method
hf	-92.12	kJ/mol	Joback Method
hfus	39.08	kJ/mol	Joback Method
hvap	70.23	kJ/mol	Joback Method
log10ws	-4.83		Crippen Method
logp	5.200		Crippen Method
mcvol	171.870	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
rinpol	2091.00		NIST Webbook
tb	711.00	K	Joback Method
tc	967.86	K	Joback Method
tf	490.39	K	Joback Method
vc	0.653	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	404.60	J/mol×K	711.00	Joback Method
cpg	415.43	J/mol×K	753.81	Joback Method
cpg	425.41	J/mol×K	796.62	Joback Method
cpg	434.66	J/mol×K	839.43	Joback Method
cpg	443.29	J/mol×K	882.24	Joback Method
cpg	451.39	J/mol×K	925.05	Joback Method
cpg	459.08	J/mol×K	967.86	Joback Method
dvisc	0.0013489	Pa×s	490.39	Joback Method
dvisc	0.0010653	Pa×s	527.16	Joback Method

dvisc	0.0008676	Pa×s	563.93	Joback Method
dvisc	0.0007245	Pa×s	600.70	Joback Method
dvisc	0.0006178	Pa×s	637.46	Joback Method
dvisc	0.0005360	Pa×s	674.23	Joback Method
dvisc	0.0004719	Pa×s	711.00	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=R173421&Units=SI

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume