2,2'-Dichlorobenzil

Other names:	2,2'-Dichlorodibenzoyl
	Benzil, 2,2'-dichloro-
	Ethanedione, bis(2-chlorophenyl)-
Inchi:	InChI=1S/C14H8Cl2O2/c15-11-7-3-1-5-9(11)13(17)14(18)10-6-2-4-8-12(10)16/h1-8H
InchiKey:	VOSNNSVWVJFJCR-UHFFFAOYSA-N
Formula:	C14H8Cl2O2
SMILES:	O=C(C(=O)c1ccccc1Cl)c1ccccc1Cl
Mol. weight [g/mol]:	279.12
CAS:	21854-95-5

Physical Properties

Property code	Value	Unit	Source
gf	-9.14	kJ/mol	Joback Method
hf	-138.81	kJ/mol	Joback Method
hfus	30.91	kJ/mol	Joback Method
hvap	74.90	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	4.059		Crippen Method
mcvol	188.220	ml/mol	McGowan Method
pc	2835.36	kPa	Joback Method
tb	765.64	K	Joback Method
tc	1023.86	K	Joback Method
tf	485.12	K	Joback Method
vc	0.714	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.04	J/mol×K	765.64	Joback Method
cpg	456.87	J/mol×K	808.68	Joback Method
cpg	466.62	J/mol×K	851.71	Joback Method
cpg	475.38	J/mol×K	894.75	Joback Method
cpg	483.21	J/mol×K	937.79	Joback Method
cpg	490.19	J/mol×K	980.83	Joback Method

cpg	496.40	J/mol×K	1023.86	Joback Method
dvisc	0.0010475	Pa×s	485.12	Joback Method
dvisc	0.0006746	Pa×s	531.87	Joback Method
dvisc	0.0004665	Pa×s	578.63	Joback Method
dvisc	0.0003409	Pa×s	625.38	Joback Method
dvisc	0.0002602	Pa×s	672.13	Joback Method
dvisc	0.0002057	Pa×s	718.89	Joback Method
dvisc	0.0001674	Pa×s	765.64	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C21854955&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

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

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