Propanoic acid, 2-(2-chlorophenoxy)-

Other names:	2-(2-Chlorophenoxy)propanoic acid
	2-(o-Chlorophenoxy)propionic acid
	Acide (o-chlorophenoxy)-2 propionique
	Propionic acid, 2-(o-chlorophenoxy)-
Inchi:	InChI=1S/C9H9ClO3/c1-6(9(11)12)13-8-5-3-2-4-7(8)10/h2-6H,1H3,(H,11,12)
InchiKey:	ZGWNXHRVUJVMCP-UHFFFAOYSA-N
Formula:	C9H9ClO3
SMILES:	CC(Oc1ccccc1Cl)C(=O)O
Mol. weight [g/mol]:	200.62
CAS:	25140-86-7

Physical Properties

Property code	Value	Unit	Source
gf	-257.43	kJ/mol	Joback Method
hf	-422.08	kJ/mol	Joback Method
hfus	20.27	kJ/mol	Joback Method
hvap	68.40	kJ/mol	Joback Method
log10ws	-2.22		Aqueous Solubility Prediction Method
logp	2.192		Crippen Method
mcvol	139.460	ml/mol	McGowan Method
pc	3642.13	kPa	Joback Method
tb	642.44	K	Joback Method
tc	852.38	K	Joback Method
tf	386.65	K	Aqueous Solubility Prediction Method
vc	0.517	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.00	J/mol×K	642.44	Joback Method
cpg	368.09	J/mol×K	817.39	Joback Method
cpg	360.85	J/mol×K	782.40	Joback Method

cpg	353.03	J/mol×K	747.41	Joback Method
cpg	344.62	J/mol×K	712.42	Joback Method
cpg	335.62	J/mol×K	677.43	Joback Method
cpg	374.77	J/mol×K	852.38	Joback Method
dvisc	0.0000629	Pa×s	642.44	Joback Method
dvisc	0.0000933	Pa×s	598.37	Joback Method
dvisc	0.0001473	Pa×s	554.30	Joback Method
dvisc	0.0002517	Pa×s	510.24	Joback Method
dvisc	0.0004758	Pa×s	466.17	Joback Method
dvisc	0.0010273	Pa×s	422.10	Joback Method
dvisc	0.0026543	Pa×s	378.03	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C25140867&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Joback Method: https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

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

Latest version available from: