Ethanol, 2-(2,4-dichlorophenoxy)-

Other names:	2,4-Dichlorophenoxyethanol
	2,4-Dichlorophenyl cellosolve
	2-(2',4'-Dichlorophenoxy) ethanol
	2-(2,4-Dichlorophenoxy)ethanol
	2-(2,4-dichlorophenoxy)-ethanol
	Cellosolve, 2,4-dichlorophenyl-
	o,p-Dichlorophenoxyethanol
Inchi:	InChI=1S/C8H8Cl2O2/c9-6-1-2-8(7(10)5-6)12-4-3-11/h1-2,5,11H,3-4H2
InchiKey:	PCCMNBRZMKANQD-UHFFFAOYSA-N
Formula:	C8H8Cl2O2
SMILES:	OCCOc1ccc(Cl)cc1Cl
Mol. weight [g/mol]:	207.05
CAS:	120-67-2

Physical Properties

Property code	Value	Unit	Source
gf	-156.05	kJ/mol	Joback Method
hf	-310.79	kJ/mol	Joback Method
hfus	23.41	kJ/mol	Joback Method
hvap	64.86	kJ/mol	Joback Method
log10ws	-2.64		Crippen Method
logp	2.365		Crippen Method
mcvol	136.040	ml/mol	McGowan Method
pc	3526.27	kPa	Joback Method
tb	608.54	K	Joback Method
tc	815.28	K	Joback Method
tf	327.00 ± 3.00	K	NIST Webbook
vc	0.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	289.62	J/mol×K	608.54	Joback Method
cpg	298.32	J/mol×K	643.00	Joback Method

cpg	306.52	J/mol×K	677.45	Joback Method
cpg	314.25	J/mol×K	711.91	Joback Method
cpg	321.51	J/mol×K	746.36	Joback Method
cpg	328.30	J/mol×K	780.82	Joback Method
cpg	334.64	J/mol×K	815.28	Joback Method
dvisc	0.0020006	Pa×s	374.27	Joback Method
dvisc	0.0008968	Pa×s	413.31	Joback Method
dvisc	0.0004617	Pa×s	452.36	Joback Method
dvisc	0.0002642	Pa×s	491.40	Joback Method
dvisc	0.0001641	Pa×s	530.45	Joback Method
dvisc	0.0001088	Pa×s	569.49	Joback Method
dvisc	0.0000760	Pa×s	608.54	Joback Method
hvapt	65.10	kJ/mol	522.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.18459e+01
Coeff. B	-3.30822e+03
Coeff. C	-1.12780e+02
Temperature range (K), min.	399.00
Temperature range (K), max.	619.06

Sources

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=C120672&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume