2,2-Dichloroethyl ethyl carbonate

Inchi: InChI=1S/C5H8Cl2O3/c1-2-9-5(8)10-3-4(6)7/h4H,2-3H2,1H3
InchiKey: WKLDGFBVDZTSMP-UHFFFAOYSA-N
Formula: C5H8Cl2O3
SMILES: CCOC(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 187.02

Physical Properties

Property code	Value	Unit	Source
gf	-374.00	kJ/mol	Joback Method
hf	-560.31	kJ/mol	Joback Method
hfus	17.55	kJ/mol	Joback Method
hvap	46.67	kJ/mol	Joback Method
log10ws	-1.76		Crippen Method
logp	1.963		Crippen Method
mcvol	119.100	ml/mol	McGowan Method
pc	3322.01	kPa	Joback Method
rinpol	1085.00		NIST Webbook
tb	486.93	K	Joback Method
tc	682.57	K	Joback Method
tf	285.34	K	Joback Method
vc	0.450	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.96	J/mol×K	486.93	Joback Method
cpg	238.17	J/mol×K	519.54	Joback Method
cpg	246.10	J/mol×K	552.14	Joback Method
cpg	253.73	J/mol×K	584.75	Joback Method
cpg	261.06	J/mol×K	617.36	Joback Method
cpg	268.07	J/mol×K	649.96	Joback Method
cpg	274.75	J/mol×K	682.57	Joback Method
dvisc	0.0028486	Pa×s	285.34	Joback Method
dvisc	0.0015479	Pa×s	318.94	Joback Method

dvisc	0.0009448	Pa×s	352.54	Joback Method
dvisc	0.0006284	Pa×s	386.13	Joback Method
dvisc	0.0004462	Pa×s	419.73	Joback Method
dvisc	0.0003333	Pa×s	453.33	Joback Method
dvisc	0.0002592	Pa×s	486.93	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U373783&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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