Propanoic acid, 2,3-dichloro-

Other names:	Propionic acid, 2,3-dichloro- «alpha»,«beta»-Dichloropropionic acid 2,3-Dichloropropionic acid Alpha,beta-dichloropropionic acid 2,3-Dichloropropanoic acid
Inchi:	InChI=1S/C3H4Cl2O2/c4-1-2(5)3(6)7/h2H,1H2,(H,6,7)
InchiKey:	GKFWNPPZHDYVLI-UHFFFAOYSA-N
Formula:	C3H4Cl2O2
SMILES:	O=C(O)C(Cl)CCl
Mol. weight [g/mol]:	142.97
CAS:	565-64-0

Physical Properties

Property code	Value	Unit	Source
gf	-317.66	kJ/mol	Joback Method
hf	-406.82	kJ/mol	Joback Method
hfus	14.08	kJ/mol	Joback Method
hvap	54.08	kJ/mol	Joback Method
log10ws	-0.60		Crippen Method
logp	0.917		Crippen Method
mcvol	85.050	ml/mol	McGowan Method
pc	4980.35	kPa	Joback Method
rinpol	1124.00		NIST Webbook
rinpol	1124.00		NIST Webbook
tb	488.51	K	Joback Method
tc	680.24	K	Joback Method
tf	323.00 ± 0.60	K	NIST Webbook
vc	0.321	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	148.88	J/mol×K	488.51	Joback Method
cpg	153.67	J/mol×K	520.46	Joback Method

cpg	158.21	J/mol×K	552.42	Joback Method
cpg	162.49	J/mol×K	584.37	Joback Method
cpg	166.52	J/mol×K	616.33	Joback Method
cpg	170.32	J/mol×K	648.28	Joback Method
cpg	173.89	J/mol×K	680.24	Joback Method
dvisc	0.0233353	Pa×s	279.16	Joback Method
dvisc	0.0072444	Pa×s	314.05	Joback Method
dvisc	0.0028417	Pa×s	348.94	Joback Method
dvisc	0.0013215	Pa×s	383.84	Joback Method
dvisc	0.0006981	Pa×s	418.73	Joback Method
dvisc	0.0004069	Pa×s	453.62	Joback Method
dvisc	0.0002561	Pa×s	488.51	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=C565640&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