Carbonochloridic acid, 2-chloroethyl ester

Other names:	Formic acid, chloro-, 2-chloroethyl ester
	«beta»-Chloroethyl chloroformate
	(2-Chloroethoxy)carbonyl chloride
	Chloroformic acid, 2-chloroethyl ester
	2-Chloroethyl chlorocarbonate
	2-Chloroethyl chloroformate
	Chloroformic acid «beta»-chloroethyl ester
	2-Chlorethylester kyseliny chlormravenci
	TL 207
Inchi:	InChI=1S/C3H4Cl2O2/c4-1-2-7-3(5)6/h1-2H2
InchiKey:	SVDDJQGVOFZBNX-UHFFFAOYSA-N
Formula:	C3H4Cl2O2
SMILES:	O=C(Cl)OCCCl
Mol. weight [g/mol]:	142.97
CAS:	627-11-2

Physical Properties

Property code	Value	Unit	Source
gf	-283.40	kJ/mol	Joback Method
hf	-381.53	kJ/mol	Joback Method
hfus	14.71	kJ/mol	Joback Method
hvap	40.20	kJ/mol	Joback Method
log10ws	-1.22		Crippen Method
logp	1.601		Crippen Method
mcvol	85.050	ml/mol	McGowan Method
pc	4249.61	kPa	Joback Method
tb	429.20	K	NIST Webbook
tc	615.80	K	Joback Method
tf	255.57	K	Joback Method
vc	0.326	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	136.89	J/mol×K	419.19	Joback Method
cpg	141.97	J/mol×K	451.96	Joback Method
cpg	146.88	J/mol×K	484.73	Joback Method
cpg	151.62	J/mol×K	517.50	Joback Method
cpg	156.17	J/mol×K	550.27	Joback Method
cpg	160.54	J/mol×K	583.04	Joback Method
cpg	164.73	J/mol×K	615.80	Joback Method
dvisc	0.0027403	Pa×s	255.57	Joback Method
dvisc	0.0016756	Pa×s	282.84	Joback Method
dvisc	0.0011172	Pa×s	310.11	Joback Method
dvisc	0.0007953	Pa×s	337.38	Joback Method
dvisc	0.0005957	Pa×s	364.65	Joback Method
dvisc	0.0004645	Pa×s	391.92	Joback Method
dvisc	0.0003741	Pa×s	419.19	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C627112&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume