Carbonic acid, 2-chloroethyl cyclohexylmethyl ester

Inchi: InChI=1S/C10H17ClO3/c11-6-7-13-10(12)14-8-9-4-2-1-3-5-9/h9H,1-8H2
InchiKey: ZVBGRKZOGKOZEI-UHFFFAOYSA-N
Formula: C10H17ClO3
SMILES: O=C(OCCCl)OCC1CCCCC1
Mol. weight [g/mol]: 220.69

Physical Properties

Property code	Value	Unit	Source
gf	-293.08	kJ/mol	Joback Method
hf	-588.17	kJ/mol	Joback Method
hfus	21.66	kJ/mol	Joback Method
hvap	54.23	kJ/mol	Joback Method
log10ws	-2.74		Crippen Method
logp	2.959		Crippen Method
mcvol	166.450	ml/mol	McGowan Method
pc	2548.19	kPa	Joback Method
rinpol	1565.00		NIST Webbook
rinpol	1565.00		NIST Webbook
tb	583.89	K	Joback Method
tc	791.65	K	Joback Method
tf	334.15	K	Joback Method
vc	0.620	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	413.15	J/mol×K	583.89	Joback Method
cpg	429.73	J/mol×K	618.52	Joback Method
cpg	445.43	J/mol×K	653.14	Joback Method
cpg	460.25	J/mol×K	687.77	Joback Method
cpg	474.19	J/mol×K	722.39	Joback Method
cpg	487.27	J/mol×K	757.02	Joback Method
cpg	499.47	J/mol×K	791.65	Joback Method
dvisc	0.0025335	Pa×s	334.15	Joback Method

dvisc	0.0012892	Pa×s	375.77	Joback Method
dvisc	0.0007507	Pa×s	417.40	Joback Method
dvisc	0.0004821	Pa×s	459.02	Joback Method
dvisc	0.0003333	Pa×s	500.64	Joback Method
dvisc	0.0002439	Pa×s	542.27	Joback Method
dvisc	0.0001865	Pa×s	583.89	Joback Method

Sources

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=U357883&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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