Pentanoic acid, 2-chloroethyl ester

Other names: Pentanoic acid, 2-chloroethyl ester
Ethanol, 2-chloro, pentanoate
Inchi: InChI=1S/C7H13ClO2/c1-2-3-4-7(9)10-6-5-8/h2-6H2,1H3
InchiKey: YTLCJSNLBLLPLD-UHFFFAOYSA-N
Formula: C7H13ClO2
SMILES: CCCCC(=O)OCCCl
Mol. weight [g/mol]: 164.63

Physical Properties

Property code	Value	Unit	Source
af	0.5434		Cheméo Relay (1.0)
gf	-237.79	kJ/mol	Joback Method
hf	-530.17	kJ/mol	Cheméo Relay (1.0)
hfus	20.87	kJ/mol	Joback Method
hvap	50.48	kJ/mol	Cheméo Relay (1.0)
ie	10.25	eV	Cheméo Relay (1.0)
log10ws	-2.18		Cheméo Relay (1.0)
logp	1.959		Crippen Method
mcvol	129.170	ml/mol	McGowan Method
pc	2826.33	kPa	Joback Method
rinpol	1086.00		NIST Webbook
rinpol	1103.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1103.00		NIST Webbook
rinpol	1109.00		NIST Webbook
rinpol	1119.00		NIST Webbook
rinpol	1089.00		NIST Webbook
ripol	1569.00		NIST Webbook
ripol	1586.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1560.00		NIST Webbook
ripol	1598.00		NIST Webbook
ripol	1569.00		NIST Webbook
tb	461.71	K	Cheméo Relay (1.0)
tc	647.21	K	Cheméo Relay (1.0)
tf	215.37	K	Cheméo Relay (1.0)

vc	0.476	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	265.22	J/mol×K	473.28	Joback Method
cpg	276.01	J/mol×K	503.72	Joback Method
cpg	286.40	J/mol×K	534.15	Joback Method
cpg	296.38	J/mol×K	564.59	Joback Method
cpg	305.96	J/mol×K	595.03	Joback Method
cpg	315.13	J/mol×K	625.46	Joback Method
cpg	323.90	J/mol×K	655.90	Joback Method
dvisc	0.0030645	Pa×s	270.73	Joback Method
dvisc	0.0016518	Pa×s	304.49	Joback Method
dvisc	0.0010072	Pa×s	338.25	Joback Method
dvisc	0.0006719	Pa×s	372.00	Joback Method
dvisc	0.0004794	Pa×s	405.76	Joback Method
dvisc	0.0003603	Pa×s	439.52	Joback Method
dvisc	0.0002820	Pa×s	473.28	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):
Cheméo Relay (1.0, beta):
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7735333&Units=SI
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

af: Acentric Factor
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
ie:	Ionization energy
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume