

Propionic acid, 2-chloro-, propyl ester

Other names:	Propanoic acid, 2-chloro, propyl ester Propyl 2-chloropropanoate
Inchi:	InChI=1S/C6H11ClO2/c1-3-4-9-6(8)5(2)7/h5H,3-4H2,1-2H3
InchiKey:	XVDQGLUGZORASO-UHFFFAOYSA-N
Formula:	C6H11ClO2
SMILES:	CCCOC(=O)C(C)Cl
Mol. weight [g/mol]:	150.60

Physical Properties

Property code	Value	Unit	Source
gf	-248.65	kJ/mol	Joback Method
hf	-432.99	kJ/mol	Joback Method
hfus	14.76	kJ/mol	Joback Method
hvap	42.10	kJ/mol	Joback Method
log10ws	-1.46		Crippen Method
logp	1.567		Crippen Method
mcvol	115.080	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
ripol	932.00		NIST Webbook
ripol	932.00		NIST Webbook
ripol	941.00		NIST Webbook
ripol	950.00		NIST Webbook
ripol	923.00		NIST Webbook
ripol	932.00		NIST Webbook
ripol	930.00		NIST Webbook
ripol	932.00		NIST Webbook
ripol	1327.00		NIST Webbook
ripol	1312.00		NIST Webbook
ripol	1340.00		NIST Webbook
ripol	1359.00		NIST Webbook
ripol	1361.00		NIST Webbook
ripol	1312.00		NIST Webbook
ripol	1304.00		NIST Webbook
ripol	1327.00		NIST Webbook
ripol	1305.00		NIST Webbook
tb	449.96	K	Joback Method
tc	638.50	K	Joback Method

tf	244.46	K	Joback Method
vc	0.439	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	225.04	J/mol×K	449.96	Joback Method
cpg	234.96	J/mol×K	481.38	Joback Method
cpg	244.50	J/mol×K	512.81	Joback Method
cpg	253.66	J/mol×K	544.23	Joback Method
cpg	262.46	J/mol×K	575.65	Joback Method
cpg	270.88	J/mol×K	607.08	Joback Method
cpg	278.93	J/mol×K	638.50	Joback Method
dvisc	0.0043249	Paxs	244.46	Joback Method
dvisc	0.0020836	Paxs	278.71	Joback Method
dvisc	0.0011778	Paxs	312.96	Joback Method
dvisc	0.0007450	Paxs	347.21	Joback Method
dvisc	0.0005117	Paxs	381.46	Joback Method
dvisc	0.0003739	Paxs	415.71	Joback Method
dvisc	0.0002866	Paxs	449.96	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U132285&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

h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
p_c:	Critical Pressure
r_{inpol}:	Non-polar retention indices
r_{ipol}:	Polar retention indices
t_b:	Normal Boiling Point Temperature
t_c:	Critical Temperature
t_f:	Normal melting (fusion) point
v_c:	Critical Volume

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