

Butanoic acid, 2-chloro-, propyl ester

Other names:	Propyl 2-chlorobutanoate n-Propyl-2-chlorobutyrate
Inchi:	InChI=1S/C7H13ClO2/c1-3-5-10-7(9)6(8)4-2/h6H,3-5H2,1-2H3
InchiKey:	NZHZYDSYLLWKOK-UHFFFAOYSA-N
Formula:	C7H13ClO2
SMILES:	CCCOC(=O)C(Cl)CC
Mol. weight [g/mol]:	164.63
CAS:	62108-71-8

Physical Properties

Property code	Value	Unit	Source
chl	-3997.00	kJ/mol	NIST Webbook
chl	-4005.30 ± 8.40	kJ/mol	NIST Webbook
gf	-240.23	kJ/mol	Joback Method
hf	-578.60 ± 9.60	kJ/mol	NIST Webbook
hfl	-630.90 ± 8.40	kJ/mol	NIST Webbook
hfus	17.35	kJ/mol	Joback Method
hvap	52.30 ± 4.20	kJ/mol	NIST Webbook
log10ws	-1.88		Crippen Method
logp	1.957		Crippen Method
mcvol	129.170	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
rinpol	1037.00		NIST Webbook
rinpol	1037.00		NIST Webbook
rinpol	1032.00		NIST Webbook
rinpol	1029.00		NIST Webbook
tb	472.84	K	Joback Method
tc	659.46	K	Joback Method
tf	255.73	K	Joback Method
vc	0.494	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
---------------	-------	------	-----------------	--------

cpg	265.41	J/mol×K	472.84	Joback Method
cpg	276.52	J/mol×K	503.94	Joback Method
cpg	287.19	J/mol×K	535.05	Joback Method
cpg	297.44	J/mol×K	566.15	Joback Method
cpg	307.25	J/mol×K	597.25	Joback Method
cpg	316.63	J/mol×K	628.35	Joback Method
cpg	325.59	J/mol×K	659.46	Joback Method
dvisc	0.0043091	Pa×s	255.73	Joback Method
dvisc	0.0020358	Pa×s	291.92	Joback Method
dvisc	0.0011348	Pa×s	328.10	Joback Method
dvisc	0.0007104	Pa×s	364.28	Joback Method
dvisc	0.0004840	Pa×s	400.47	Joback Method
dvisc	0.0003514	Pa×s	436.65	Joback Method
dvisc	0.0002680	Pa×s	472.84	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C62108718&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

Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase 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

Latest version available from:

<https://www.cheméo.com/cid/62-962-5/Butanoic-acid-2-chloro-propyl-ester.pdf>

Generated by Cheméo on 2025-12-05 11:47:14.303911563 +0000 UTC m=+4683431.833952233.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.