

# Butanoic acid, 4-chloro, 2-propynyl ester

**Inchi:** InChI=1S/C7H9ClO2/c1-2-6-10-7(9)4-3-5-8/h1H,3-6H2  
**InchiKey:** DEICQYWFSRQMEV-UHFFFAOYSA-N  
**Formula:** C7H9ClO2  
**SMILES:** C#CCOC(=O)CCCCl  
**Mol. weight [g/mol]:** 160.60

## Physical Properties

Property code	Value	Unit	Source
gf	-14.72	kJ/mol	Joback Method
hf	-156.45	kJ/mol	Joback Method
hfus	23.85	kJ/mol	Joback Method
hvap	44.58	kJ/mol	Joback Method
log10ws	-1.56		Crippen Method
logp	1.182		Crippen Method
mcvol	120.570	ml/mol	McGowan Method
pc	3329.68	kPa	Joback Method
ripol	1111.00		NIST Webbook
ripol	1115.00		NIST Webbook
ripol	1109.00		NIST Webbook
ripol	1089.00		NIST Webbook
ripol	1892.00		NIST Webbook
ripol	1867.00		NIST Webbook
ripol	1858.00		NIST Webbook
ripol	1817.00		NIST Webbook
ripol	1817.00		NIST Webbook
tb	463.40	K	Joback Method
tc	658.89	K	Joback Method
tf	317.70	K	Joback Method
vc	0.463	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	234.58	J/mol×K	463.40	Joback Method

cpg	243.75	J/mol×K	495.98	Joback Method
cpg	252.51	J/mol×K	528.56	Joback Method
cpg	260.88	J/mol×K	561.14	Joback Method
cpg	268.86	J/mol×K	593.73	Joback Method
cpg	276.45	J/mol×K	626.31	Joback Method
cpg	283.67	J/mol×K	658.89	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R28942&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R28942&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>ripol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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