

# Ethyl 3-acetoxybutyrate

<b>Other names:</b>	Ethyl 3-(acetyloxy)butanoate Ethyl 3-acetoxybutanoate Butyric acid, 3-hydroxy-, ethyl ester, acetate
<b>Inchi:</b>	InChI=1S/C8H14O4/c1-4-11-8(10)5-6(2)12-7(3)9/h6H,4-5H2,1-3H3
<b>InchiKey:</b>	JFWYJXYRFBRWSH-UHFFFAOYSA-N
<b>Formula:</b>	C8H14O4
<b>SMILES:</b>	CCOC(=O)CC(C)OC(C)=O
<b>Mol. weight [g/mol]:</b>	174.19
<b>CAS:</b>	27846-49-7

## Physical Properties

Property code	Value	Unit	Source
gf	-453.80	kJ/mol	Joback Method
hf	-703.33	kJ/mol	Joback Method
hfus	18.53	kJ/mol	Joback Method
hvap	51.33	kJ/mol	Joback Method
log10ws	-1.01		Crippen Method
logp	0.891		Crippen Method
mcvol	138.460	ml/mol	McGowan Method
pc	2811.36	kPa	Joback Method
rinpol	1109.20		NIST Webbook
rinpol	1109.20		NIST Webbook
ripol	1576.00		NIST Webbook
ripol	1570.00		NIST Webbook
ripol	1569.00		NIST Webbook
tb	534.58	K	Joback Method
tc	722.01	K	Joback Method
tf	309.24	K	Joback Method
vc	0.525	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	322.54	J/molxK	534.58	Joback Method

cpg	334.30	J/molxK	565.82	Joback Method
cpg	345.61	J/molxK	597.06	Joback Method
cpg	356.46	J/molxK	628.29	Joback Method
cpg	366.85	J/molxK	659.53	Joback Method
cpg	376.76	J/molxK	690.77	Joback Method
cpg	386.20	J/molxK	722.01	Joback Method
dvisc	0.0026376	Paxs	309.24	Joback Method
dvisc	0.0013856	Paxs	346.80	Joback Method
dvisc	0.0008255	Paxs	384.35	Joback Method
dvisc	0.0005393	Paxs	421.91	Joback Method
dvisc	0.0003777	Paxs	459.47	Joback Method
dvisc	0.0002792	Paxs	497.02	Joback Method
dvisc	0.0002153	Paxs	534.58	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<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=C27846497&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C27846497&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<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

**tf:** Normal melting (fusion) point

**vc:** Critical Volume

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