

# Methyl 4-methoxyacetoacetate

Other names:	Methyl methoxyacetoacetate Butanoic acid, 4-methoxy-3-oxo-, methyl ester methyl 4-methoxy-3-oxobutyrate
Inchi:	InChI=1S/C6H10O4/c1-9-4-5(7)3-6(8)10-2/h3-4H2,1-2H3
InchiKey:	QGBPKJFJAVDUNC-UHFFFAOYSA-N
Formula:	C6H10O4
SMILES:	COCC(=O)CC(=O)OC
Mol. weight [g/mol]:	146.14
CAS:	41051-15-4

## Physical Properties

Property code	Value	Unit	Source
gf	-468.20	kJ/mol	Joback Method
hf	-656.77	kJ/mol	Joback Method
hfus	16.87	kJ/mol	Joback Method
hvap	47.26	kJ/mol	Joback Method
log10ws	0.44		Crippen Method
logp	-0.235		Crippen Method
mcvol	110.280	ml/mol	McGowan Method
pc	3452.08	kPa	Joback Method
tb	489.26	K	Joback Method
tc	677.07	K	Joback Method
tf	301.70	K	Joback Method
vc	0.419	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	236.42	J/molxK	489.26	Joback Method
cpg	279.74	J/molxK	645.76	Joback Method
cpg	271.71	J/molxK	614.46	Joback Method
cpg	263.35	J/molxK	583.16	Joback Method
cpg	254.67	J/molxK	551.86	Joback Method
cpg	245.69	J/molxK	520.56	Joback Method

cpg	287.43	J/molxK	677.07	Joback Method
dvisc	0.0002663	Paxs	489.26	Joback Method
dvisc	0.0003335	Paxs	458.00	Joback Method
dvisc	0.0004316	Paxs	426.74	Joback Method
dvisc	0.0005818	Paxs	395.48	Joback Method
dvisc	0.0008254	Paxs	364.22	Joback Method
dvisc	0.0012506	Paxs	332.96	Joback Method
dvisc	0.0020653	Paxs	301.70	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>
<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=C41051154&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C41051154&amp;Units=SI</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>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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