

# Glycine, N,N-dimethyl-, methyl ester

<b>Other names:</b>	Methyl (dimethylamino) acetate N,N-Dimethylglycine methyl ester (CH <sub>3</sub> ) <sub>2</sub> NCH <sub>2</sub> COOCH <sub>3</sub>
<b>Inchi:</b>	InChI=1S/C5H11NO2/c1-6(2)4-5(7)8-3/h4H2,1-3H3
<b>InchiKey:</b>	LRZFEBJUJIQVDQ-UHFFFAOYSA-N
<b>Formula:</b>	C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub>
<b>SMILES:</b>	COC(=O)CN(C)C
<b>Mol. weight [g/mol]:</b>	117.15
<b>CAS:</b>	7148-06-3

## Physical Properties

Property code	Value	Unit	Source
chl	-3125.30 ± 0.63	kJ/mol	NIST Webbook
gf	-131.92	kJ/mol	Joback Method
hf	-370.40 ± 0.79	kJ/mol	NIST Webbook
hfl	-414.30 ± 0.67	kJ/mol	NIST Webbook
hfus	14.51	kJ/mol	Joback Method
hvap	43.93 ± 0.46	kJ/mol	NIST Webbook
ie	7.96 ± 0.05	eV	NIST Webbook
ie	7.96 ± 0.03	eV	NIST Webbook
log10ws	0.65		Crippen Method
logp	-0.279		Crippen Method
mcvol	98.730	ml/mol	McGowan Method
pc	3655.35	kPa	Joback Method
rinpol	810.00		NIST Webbook
rinpol	809.00		NIST Webbook
tb	402.53	K	Joback Method
tc	579.52	K	Joback Method
tf	250.74	K	Joback Method
vc	0.357	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
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cpg	190.41	J/mol×K	402.53	Joback Method
cpg	200.15	J/mol×K	432.03	Joback Method
cpg	209.53	J/mol×K	461.53	Joback Method
cpg	218.57	J/mol×K	491.03	Joback Method
cpg	227.26	J/mol×K	520.53	Joback Method
cpg	235.61	J/mol×K	550.03	Joback Method
cpg	243.61	J/mol×K	579.52	Joback Method

## Sources

<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>
<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=C7148063&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C7148063&amp;Units=SI</a>

## Legend

<b>chl:</b>	Standard liquid enthalpy of combustion
<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>hfl:</b>	Liquid phase 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>ie:</b>	Ionization energy
<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>rinpol:</b>	Non-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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