

Glycine, ethyl ester

Other names:	(Ethoxycarbonyl)methylamine Ethyl 2-aminoacetate Ethyl aminoacetate Ethyl glycinate Ethyl glycine Aminoacetic acid, ethyl ester Glicine, ethyl ester
Inchi:	InChI=1S/C4H9NO2/c1-2-7-4(6)3-5/h2-3,5H2,1H3
InchiKey:	NTNZTEQNFHNYBC-UHFFFAOYSA-N
Formula:	C4H9NO2
SMILES:	CCOC(=O)CN
Mol. weight [g/mol]:	103.12
CAS:	459-73-4

Physical Properties

Property code	Value	Unit	Source
gf	-184.67	kJ/mol	Joback Method
hf	-336.90	kJ/mol	Joback Method
hfus	14.10	kJ/mol	Joback Method
hvap	44.30	kJ/mol	Joback Method
ie	8.80	eV	NIST Webbook
log10ws	0.21		Crippen Method
logp	-0.492		Crippen Method
mvol	84.640	ml/mol	McGowan Method
pc	4450.38	kPa	Joback Method
tb	439.74	K	Joback Method
tc	634.31	K	Joback Method
tf	290.26	K	Joback Method
vc	0.312	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	172.31	J/mol×K	439.74	Joback Method

cpg	180.30	J/mol×K	472.17	Joback Method
cpg	188.01	J/mol×K	504.60	Joback Method
cpg	195.44	J/mol×K	537.03	Joback Method
cpg	202.59	J/mol×K	569.46	Joback Method
cpg	209.45	J/mol×K	601.88	Joback Method
cpg	216.03	J/mol×K	634.31	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C459734&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

Legend

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

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