

# L-Valine, N-glycyl-

**Other names:**

Gly-L-val  
Gly-val  
Glycylvaline  
L-glycylvaline  
Valine, N-glycyl-, L-  
glycyl-L-valine

**Inchi:**

InChI=1S/C7H14N2O3/c1-4(2)6(7(11)12)9-5(10)3-8/h4,6H,3,8H2,1-2H3,(H,9,10)(H,11,12)

**InchiKey:**

STKYPAFSDFAEPLURJTMIESA-N

**Formula:**

C7H14N2O3

**SMILES:**

CC(C)C(NC(=O)CN)C(=O)O

**Mol. weight [g/mol]:**

174.20

**CAS:**

1963-21-9

## Physical Properties

Property code	Value	Unit	Source
basg	874.10	kJ/mol	NIST Webbook
gf	-235.64	kJ/mol	Joback Method
hf	-488.50	kJ/mol	Joback Method
hfus	24.42	kJ/mol	Joback Method
hvap	77.65	kJ/mol	Joback Method
log10ws	-0.12		Crippen Method
logp	-0.829		Crippen Method
mvol	138.460	ml/mol	McGowan Method
pc	3975.52	kPa	Joback Method
tb	681.30	K	Joback Method
tc	876.47	K	Joback Method
tf	435.25	K	Joback Method
vc	0.510	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	379.80	J/mol×K	681.30	Joback Method
cpg	389.37	J/mol×K	713.83	Joback Method

cpg	398.38	J/molxK	746.36	Joback Method
cpg	406.84	J/molxK	778.88	Joback Method
cpg	414.76	J/molxK	811.41	Joback Method
cpg	422.17	J/molxK	843.94	Joback Method
cpg	429.08	J/molxK	876.47	Joback Method

## Sources

### NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1963219&Units=SI>

### Volumetric and Conductometric

<https://www.doi.org/10.1021/je900449q>

### Behavior at T = 298.15 K of

<https://www.doi.org/10.1016/j.jct.2016.06.018>

### Intermolecular Interactions of

<https://www.doi.org/10.1016/j.fluid.2014.01.038>

### alpha-amino acids and 2-methylbutanoic

<https://www.doi.org/10.1016/j.fluid.2014.01.038>

### dipeptides with the conductometric and

<https://www.doi.org/10.1016/j.fluid.2014.01.038>

### specific heat capacities of glycyl and pentanoic

<https://www.doi.org/10.1021/je100703r>

### dipeptides in the condensed phase by

<https://www.doi.org/10.1021/je100703r>

### calorimetry and transfer volumes of

<http://link.springer.com/article/10.1007/BF02311772>

### dipeptides in sucrose and 2,3-

<http://link.springer.com/article/10.1007/BF02311772>

### Effect of Temperature on the

<https://www.doi.org/10.1021/je100068y>

### Interactions of Glycyl Dipeptides with

<https://www.doi.org/10.1021/je100068y>

### Sodium Dodecyl Sulfate in Aqueous

<https://www.doi.org/10.1016/j.jct.2012.09.018>

### Solutions: Volumetric, Conductometric,

<https://www.doi.org/10.1016/j.jct.2012.09.018>

### and Spectroscopic study:

<http://pubs.acs.org/doi/abs/10.1021/ci990307i>

### Interactions of Some Glycyl Dipeptides

<https://www.doi.org/10.1021/je800713c>

### with Sodium Butyrate in Aqueous

<https://www.doi.org/10.1021/je800713c>

### Solutions at 298.15 K: Volumetric, Conductometric,

<https://www.doi.org/10.1016/j.jct.2015.10.004>

### and Fluorescence Probe Studies on the

<https://www.doi.org/10.1016/j.jct.2015.10.004>

### Interactions of Dipeptides with

<https://www.doi.org/10.1016/j.jct.2015.10.004>

### Potassium Perfluoroalkanesulfonate in

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

### Aqueous Solution at Different

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

### Temperatures: Volumetric, Conductometric,

<https://www.doi.org/10.1016/j.jct.2012.01.024>

### and Fluorescence Probe Studies of

<https://www.doi.org/10.1016/j.jct.2012.01.024>

### Interactions between Glycyl Dipeptides

<https://www.doi.org/10.1016/j.jct.2012.01.024>

### and Sodium Caprylate in Aqueous

<https://www.doi.org/10.1016/j.jct.2012.01.024>

### Media:

<https://www.doi.org/10.1016/j.jct.2012.01.024>

## Legend

- basg: Gas basicity
- 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
- 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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