

# Betaine

Other names:	(carboxymethyl)trimethylammonium hydroxide inner salt (trimethylammonio)acetate 1-Carboxy-N,N,N-trimethylmethanaminium hydroxide, inner salt 2-(Trimethylammonio)ethanoic acid, hydroxide, inner salt Abromine Cystadane Glycine betaine Glycine, trimethylbetaine Glycocol betaine Glycylbetaine Loramine AMB-13 Lycine Methanaminium, 1-carboxy-N,N,N-trimethyl-, hydroxide, inner salt Methanaminium, 1-carboxy-N,N,N-trimethyl-, inner salt Oxyneurine Rubrine C Trimethylaminoacetate Trimethylaminoacetic acid Trimethylglycine Trimethylglycocol «alpha»-Earleine
Inchi:	InChI=1S/C5H11NO2/c1-6(2,3)4-5(7)8/h4H2,1-3H3
InchiKey:	KWIUHFFTVRNATP-UHFFFAOYSA-N
Formula:	C5H11NO2
SMILES:	C[N+](C)(C)CC(=O)[O-]
Mol. weight [g/mol]:	117.15
CAS:	107-43-7

## Physical Properties

Property code	Value	Unit	Source
log10ws	-1.24		Crippen Method
logp	-1.557		Crippen Method
mccvol	98.730	ml/mol	McGowan Method

# Sources

Counteracting effects of trimethylamine N-oxide and betaine on the hydration of urea with zwitterionic glycine peptides: Mode of action of betaine on some amino acids and globular proteins: Thermodynamic considerations agents: Trimethylamine-N-oxide, McGowan Method and N-methyl derivatives  
The volumetric and compressibility Specific Heat Capacities of Two Functional Ionic Liquids and Two Functional Deep Eutectic Solvents for investigations of molecular interactions in some amino acid and urea solutions  
Solubility of Different Sugar Derivatives in Aqueous Betaine and Urea Solutions  
Isoentropic compressibility study of physical properties of aqueous and aprotic solvents based on L-proline or  
Characterization of the volumetric properties of betaine in aqueous solutions  
Compatible Composites: Their properties, properties relevant for reference  
Protection against osmotic stress:  
Solubility and Solution Thermodynamics of Betaine in Monomeric Solvents and Binary Homologous series of amino acids with (sodium chloride betaine) mixture  
Solubility of zwitterionic alkaloids in aprotic solvents and their mixtures  
Thermodynamic properties of acidic Acid and Maleic Acid-Based Natural Deep Eutectic Solvents:  
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## Legend

**log10ws:** Log10 of Water solubility in mol/l  
**logp:** Octanol/Water partition coefficient  
**mcvol:** McGowan's characteristic volume

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