

# N-Acetylethylenediamine

<b>Other names:</b>	Acetamide, N-(2-aminoethyl)- N-Monoacetylethylenediamine Acetamide, N-(2-aminoethyl)-
<b>Inchi:</b>	InChI=1S/C4H10N2O/c1-4(7)6-3-2-5/h2-3,5H2,1H3,(H,6,7)
<b>InchiKey:</b>	DAKZISABEDGGSV-UHFFFAOYSA-N
<b>Formula:</b>	C4H10N2O
<b>SMILES:</b>	CC(=O)NCCN
<b>Mol. weight [g/mol]:</b>	102.14
<b>CAS:</b>	1001-53-2

## Physical Properties

Property code	Value	Unit	Source
gf	9.72	kJ/mol	Joback Method
hf	-151.21	kJ/mol	Joback Method
hfus	18.01	kJ/mol	Joback Method
hvap	48.32	kJ/mol	Joback Method
log10ws	0.10		Crippen Method
logp	-0.919		Crippen Method
mcvol	88.750	ml/mol	McGowan Method
pc	4634.00	kPa	Joback Method
tb	467.49	K	Joback Method
tc	665.92	K	Joback Method
tf	320.69	K	Joback Method
vc	0.330	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	189.41	J/molxK	467.49	Joback Method
cpg	198.33	J/molxK	500.56	Joback Method
cpg	206.83	J/molxK	533.63	Joback Method
cpg	214.91	J/molxK	566.71	Joback Method
cpg	222.59	J/molxK	599.78	Joback Method
cpg	229.88	J/molxK	632.85	Joback Method

cpg

236.79

J/mol×K

665.92

Joback Method

## Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	401.20	K	0.40	NIST Webbook

## Sources

McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C1001532&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1001532&amp;Units=SI</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<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>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>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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