

# Acetamide, N-ethyl-N-phenyl-

<b>Other names:</b>	Acetanilide, N-ethyl- Acetethylanilide Ethylacetanilide Mannol N-Ethylacetanilide N-Ethyl-N-phenylacetamide
<b>Inchi:</b>	InChI=1S/C10H13NO/c1-3-11(9(2)12)10-7-5-4-6-8-10/h4-8H,3H2,1-2H3
<b>InchiKey:</b>	FSSVIYSWRLKICW-UHFFFAOYSA-N
<b>Formula:</b>	C10H13NO
<b>SMILES:</b>	CCN(C(C)=O)c1ccccc1
<b>Mol. weight [g/mol]:</b>	163.22
<b>CAS:</b>	529-65-7

## Physical Properties

Property code	Value	Unit	Source
gf	127.59	kJ/mol	Joback Method
hf	-58.25	kJ/mol	Joback Method
hfus	20.32	kJ/mol	Joback Method
hvap	48.92	kJ/mol	Joback Method
log10ws	-1.99		Crippen Method
logp	2.059		Crippen Method
mcvol	139.550	ml/mol	McGowan Method
pc	3135.00	kPa	Joback Method
tb	521.19	K	Joback Method
tc	732.99	K	Joback Method
tf	311.28	K	Joback Method
vc	0.511	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	310.15	J/mol×K	521.19	Joback Method
cpg	324.85	J/mol×K	556.49	Joback Method
cpg	338.60	J/mol×K	591.79	Joback Method

cpg	351.47	J/mol×K	627.09	Joback Method
cpg	363.49	J/mol×K	662.39	Joback Method
cpg	374.69	J/mol×K	697.69	Joback Method
cpg	385.14	J/mol×K	732.99	Joback Method

## Sources

<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=C529657&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C529657&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>

## 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>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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