

# Methanone, (4-aminophenyl)phenyl-

<b>Other names:</b>	Benzophenone, 4-amino- p-Aminobenzophenone p-Benzoylaniline 4-Aminobenzophenone USAF A-233 (4-Amino-phenyl)phenylmethanone 4-Benzoylaniline 4-Aminophenyl phenyl ketone NSC 7665 4-Benzoylbenzenamine
<b>Inchi:</b>	InChI=1S/C13H11NO/c14-12-8-6-11(7-9-12)13(15)10-4-2-1-3-5-10/h1-9H,14H2
<b>InchiKey:</b>	RBKHNGHPZZZJCI-UHFFFAOYSA-N
<b>Formula:</b>	C13H11NO
<b>SMILES:</b>	<chem>Nc1ccc(C(=O)c2ccccc2)cc1</chem>
<b>Mol. weight [g/mol]:</b>	197.23
<b>CAS:</b>	1137-41-3

## Physical Properties

Property code	Value	Unit	Source
gf	211.30	kJ/mol	Joback Method
hf	71.15	kJ/mol	Joback Method
hfus	23.92	kJ/mol	Joback Method
hvap	67.13	kJ/mol	Joback Method
ie	8.40 ± 0.10	eV	NIST Webbook
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log10ws	-3.06		Crippen Method
logp	2.500		Crippen Method
mcvol	158.060	ml/mol	McGowan Method
pc	3464.28	kPa	Joback Method
tb	681.58	K	Joback Method
tc	940.51	K	Joback Method
tf	395.90 ± 1.50	K	NIST Webbook
tf	397.00	K	NIST Webbook
vc	0.583	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	398.28	J/mol×K	681.58	Joback Method
cpg	412.12	J/mol×K	724.73	Joback Method
cpg	424.72	J/mol×K	767.89	Joback Method
cpg	436.18	J/mol×K	811.04	Joback Method
cpg	446.58	J/mol×K	854.20	Joback Method
cpg	455.99	J/mol×K	897.35	Joback Method
cpg	464.50	J/mol×K	940.51	Joback Method

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	519.00	K	1.70	NIST Webbook

## 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=C1137413&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1137413&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>ie:</b>	Ionization energy
<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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