

# 1,2-Benzenediamine, N,N-dimethyl-

<b>Other names:</b>	o-Phenylenediamine, N,N-dimethyl- 2-Amino-N,N-dimethylaniline o-(Dimethylamino)aniline 2-Dimethylaminoaniline N,N-Dimethyl-o-phenylenediamine 1,2-Phenylenediamine, N,N'-dimethyl-
<b>Inchi:</b>	InChI=1S/C8H12N2/c1-10(2)8-6-4-3-5-7(8)9/h3-6H,9H2,1-2H3
<b>InchiKey:</b>	HJXIRCMNJLIHQQR-UHFFFAOYSA-N
<b>Formula:</b>	C8H12N2
<b>SMILES:</b>	CN(C)c1ccccc1N
<b>Mol. weight [g/mol]:</b>	136.19
<b>CAS:</b>	2836-03-5

## Physical Properties

Property code	Value	Unit	Source
gf	296.49	kJ/mol	Joback Method
hf	117.93	kJ/mol	Joback Method
hfus	18.35	kJ/mol	Joback Method
hvap	49.02	kJ/mol	Joback Method
log10ws	-1.01		Crippen Method
logp	1.335		Crippen Method
mvol	119.780	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
rinpol	1216.00		NIST Webbook
tb	499.07	K	Joback Method
tc	720.04	K	Joback Method
tf	334.59	K	Joback Method
vc	0.422	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	260.81	J/mol×K	499.07	Joback Method
cpg	274.36	J/mol×K	535.90	Joback Method

cpg	287.05	J/mol×K	572.73	Joback Method
cpg	298.92	J/mol×K	609.56	Joback Method
cpg	310.01	J/mol×K	646.38	Joback Method
cpg	320.35	J/mol×K	683.21	Joback Method
cpg	329.99	J/mol×K	720.04	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<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=C2836035&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C2836035&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</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>rinpola:</b>	Non-polar retention indices
<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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