

# Benzenamine, N,N-diethyl-2-methyl-

<b>Other names:</b>	2-(Dimethylamino)toluene N,N-Diethyl-2-methylaniline N,N-Diethyl-o-toluidine N,N-Diethyl-o-toluidinium ion o-Toluidine, N,N-diethyl-
<b>Inchi:</b>	InChI=1S/C11H17N/c1-4-12(5-2)11-9-7-6-8-10(11)3/h6-9H,4-5H2,1-3H3
<b>InchiKey:</b>	YQYUUNRAPYPAPC-UHFFFAOYSA-N
<b>Formula:</b>	C11H17N
<b>SMILES:</b>	CCN(CC)c1ccccc1C
<b>Mol. weight [g/mol]:</b>	163.26
<b>CAS:</b>	606-46-2

## Physical Properties

Property code	Value	Unit	Source
gf	255.30	kJ/mol	Joback Method
hf	22.22	kJ/mol	Joback Method
hfus	20.92	kJ/mol	Joback Method
hvap	45.06	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	2.841		Crippen Method
mcvol	152.070	ml/mol	McGowan Method
pc	2603.08	kPa	Joback Method
rinpol	1193.00		NIST Webbook
ripol	1428.00		NIST Webbook
tb	495.18	K	Joback Method
tc	695.71	K	Joback Method
tf	285.14	K	Joback Method
vc	0.561	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.22	J/molxK	495.18	Joback Method
cpg	350.65	J/molxK	528.60	Joback Method

cpg	366.18	J/mol×K	562.02	Joback Method
cpg	380.85	J/mol×K	595.44	Joback Method
cpg	394.69	J/mol×K	628.86	Joback Method
cpg	407.74	J/mol×K	662.29	Joback Method
cpg	420.04	J/mol×K	695.71	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.31197e+01
Coeff. B	-3.66397e+03
Coeff. C	-7.51880e+01
Temperature range (K), min.	360.72
Temperature range (K), max.	544.44

## Sources

<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>
<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=C606462&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C606462&amp;Units=SI</a>
<b>The Yaws Handbook of Vapor Pressure:</b>	<a href="https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure">https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>pvap:</b>	Vapor pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	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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