

# 3-Methyl-4'-nitro-4-N,N-dimethylaminoazobenzene

**Inchi:** InChI=1S/C15H16N4O2/c1-11-10-13(6-9-15(11)18(2)3)17-16-12-4-7-14(8-5-12)19(20)21  
**InchiKey:** YGMSETFPVMNTRG-WUKNDPDISA-N  
**Formula:** C15H16N4O2  
**SMILES:** Cc1cc(N=Nc2ccc([N+](=O)[O-])cc2)ccc1N(C)C  
**Mol. weight [g/mol]:** 284.31  
**CAS:** 92114-99-3

## Physical Properties

Property code	Value	Unit	Source
hf	189.71	kJ/mol	Joback Method
hvap	80.83	kJ/mol	Joback Method
log10ws	-4.55		Crippen Method
logp	4.385		Crippen Method
mcvol	217.750	ml/mol	McGowan Method
pc	1901.92	kPa	Joback Method
tb	924.38	K	Joback Method
tc	1189.79	K	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	125.50 ± 1.30	kJ/mol	380.50	NIST Webbook
hsubt	126.40 ± 3.80	kJ/mol	380.50	NIST Webbook

## Sources

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>  
**Crippen Method:** [https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)  
**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)  
**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>  
**NIST Webbook:** <http://webbook.nist.gov/cgi/cbook.cgi?ID=C92114993&Units=SI>

# Legend

<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hsubt:</b>	Enthalpy of sublimation at a given temperature
<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

Latest version available from:

<https://www.cheméo.com/cid/21-647-0/3-Methyl-4-nitro-4-N-N-dimethylaminoazobenzene.pdf>

Generated by Cheméo on 2024-04-25 19:25:34.826320674 +0000 UTC m=+16362383.746897985.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.