

N,N-dimethyl-2-nitroaniline

Inchi:	InChI=1S/C8H10N2O2/c1-9(2)7-5-3-4-6-8(7)10(11)12/h3-6H,1-2H3
InchiKey:	NPZDNLICYFLDJFA-UHFFFAOYSA-N
Formula:	C8H10N2O2
SMILES:	CN(C)c1ccccc1[N+](=O)[O-]
Mol. weight [g/mol]:	166.18
CAS:	610-17-3

Physical Properties

Property code	Value	Unit	Source
gf	265.59	kJ/mol	Joback Method
hf	73.38	kJ/mol	Joback Method
hfus	24.51	kJ/mol	Joback Method
hvap	54.97	kJ/mol	Joback Method
log10ws	-2.03		Crippen Method
logp	1.661		Crippen Method
mcvol	127.220	ml/mol	McGowan Method
pc	3628.97	kPa	Joback Method
tb	578.38	K	Joback Method
tc	818.79	K	Joback Method
tf	394.94	K	Joback Method
vc	0.475	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.59	J/molxK	578.38	Joback Method
cpg	312.53	J/molxK	618.45	Joback Method
cpg	324.50	J/molxK	658.52	Joback Method
cpg	335.55	J/molxK	698.59	Joback Method
cpg	345.73	J/molxK	738.65	Joback Method
cpg	355.11	J/molxK	778.72	Joback Method
cpg	363.72	J/molxK	818.79	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	419.20	K	2.70	NIST Webbook
tbrp	358.00 ± 7.00	K	0.01	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
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=C610173&Units=SI&Mask=3FFF

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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