

Benzenamine, N,4-dimethyl-

Other names:	p-Toluidine, N-methyl- p,N-Dimethylaniline N-Methyl-p-toluidine N-Methyl-4-methylaniline N,p-Dimethylaniline N,4-Dimethylbenzenamine
Inchi:	InChI=1S/C8H11N/c1-7-3-5-8(9-2)6-4-7/h3-6,9H,1-2H3
InchiKey:	QCIFLGSATTWUQJ-UHFFFAOYSA-N
Formula:	C8H11N
SMILES:	CNc1ccc(C)cc1
Mol. weight [g/mol]:	121.18
CAS:	623-08-5

Physical Properties

Property code	Value	Unit	Source
gf	208.65	kJ/mol	Joback Method
hf	70.08	kJ/mol	Joback Method
hfus	15.23	kJ/mol	Joback Method
hvap	42.78	kJ/mol	Joback Method
ie	7.13	eV	NIST Webbook
ie	7.60 ± 0.10	eV	NIST Webbook
log10ws	-1.96		Crippen Method
logp	2.037		Crippen Method
mcvol	109.800	ml/mol	McGowan Method
pc	3642.13	kPa	Joback Method
rinpola	1132.40		NIST Webbook
ripola	1780.00		NIST Webbook
ripol	1780.00		NIST Webbook
tb	483.20	K	NIST Webbook
tc	678.02	K	Joback Method
tf	271.52	K	Joback Method
vc	0.410	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	218.64	J/mol×K	464.27	Joback Method
cpg	231.43	J/mol×K	499.89	Joback Method
cpg	243.51	J/mol×K	535.52	Joback Method
cpg	254.89	J/mol×K	571.14	Joback Method
cpg	265.62	J/mol×K	606.77	Joback Method
cpg	275.70	J/mol×K	642.39	Joback Method
cpg	285.18	J/mol×K	678.02	Joback Method

Sources

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=C623085&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume

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