Benzenamine, 4,4'-methylenebis[N,N-dimethyl-

Other names:
Aniline, 4,4'-methylenebis[N,N-dimethyl-
Arnold's base
p,p'-Bis(dimethylamino)diphenylmethane
4,4'-Bis(dimethylamino)diphenylmethane
Bis[p-(N,N-dimethylamino)phenyl]methane
Bis[p-(dimethylamino)phenyl]methane
Bis[4-(dimethylamino)phenyl]methane
Bis[4-(N,N-dimethylamino)phenyl]methane
4,4'-Bis(dimethylaminophenyl)methane
4,4'-Methylenebis[N,N-dimethylaniline]
Michler's base
Michler's hydride
Michler's methane
Reduced michler's ketone
Tetrabase
Tetramethyldiaminodiphenylmethane
N,N,N',N'-Tetramethyl-p,p'-diaminodiphenylmethane
N,N,N',N'-Tetramethyl-4,4'-diaminodiphenylmethane
p,p'-Tetramethyldiaminodiphenylmethane
4,4'-Tetramethyldiaminodiphenylmethane
p,p-Dimethylaminodiphenylmethane
p,p-Tetramethyldiaminodiphenylmethane
p,p'-Bis(N,N-dimethylaminophenyl)methane
Diphenylmethane, tetramethyldiamino-
Methane, bis(p-(dimethylamino)phenyl)-
Methanediamine, tetramethyl-N,N'-diphenyl-
N,N'-Tetramethyldiaminodiphenylmethane
NCI-C01990
4,4'-(Dimethylamino)diphenylmethane
BAZE michlerova
4,4'-Methylenebis(N,N-dimethyl)benzenamine
4,4'-Methylene bis(N,N'-dimethylaniline)
Methane base
Methylene base
p,p'-Tetramethyldiamindiphenylmethane
Methane, bis(4,4'-dimethylaminophenyl)-
NSC 36782
N,N,N',N'-tetramethyl-4,4'-methylenedianiline

Inchi: InChI=1S/C17H22N2/c1-18(2)16-9-5-14(6-10-16)13-15-7-11-17(12-8-15)19(3)4/h5-12H,1

InchiKey: JNRLEMMIVRBKJE-UHFFFAOYSA-N

Formula: C17H22N2
SMILES: CN(C)c1ccc(Cc2ccc(N(C)C)cc2)cc1
Mol. weight [g/mol]: 254.37
CAS: 101-61-1

Physical Properties

Property code	Value	Unit	Source
gf	519.38	kJ/mol	Joback Method
hf	190.97	kJ/mol	Joback Method
hfus	33.13	kJ/mol	Joback Method
hvap	63.40	kJ/mol	Joback Method
ie	6.72	eV	NIST Webbook
ie	7.10	eV	NIST Webbook
log10ws	-3.39		Crippen Method
logp	3.409		Crippen Method
mcvol	222.830	ml/mol	McGowan Method
pc	2025.41	kPa	Joback Method
tb	663.00	K	NIST Webbook
tc	897.29	K	Joback Method
tf	424.17	K	Joback Method
vc	0.807	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	602.52	J/mol×K	676.56	Joback Method
cpg	621.33	J/mol×K	713.35	Joback Method
cpg	638.83	J/mol×K	750.14	Joback Method
cpg	655.10	J/mol×K	786.92	Joback Method
cpg	670.23	J/mol×K	823.71	Joback Method
cpg	684.29	J/mol×K	860.50	Joback Method
cpg	697.36	J/mol×K	897.29	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	456.50 ± 1.50	K	0.40	NIST Webbook

Sources

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=C101611&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume