p,p'-Benzylidenebis(N,N-dimethylaniline)

Other names: Leuco malachite green
Benzenamine, 4,4'-(phenylmethylene)bis[N,N-dimethyl-
Aniline, 4,4'-benzylidenebis(N,N-dimethyl-
Bis(p-dimethylaminophenyl)phenylmethane
Bis(p-(N,N-dimethylamino)phenyl)phenylmethane
Bis(4,4'-(dimethylamino)phenyl)phenyl methane
C.I. Basic Green 4, leuco base
Malachite green leuco
Malachite green leuco base
Tetramethyldiaminotriphenylmethane
4,4'-Benzylidene bis(N,N-dimethylaniline)
4,4'-Bis(dimethylamino)triphenylmethane
4,4'-Bis(N,N-dimethylaminophenyl)phenylmethane
NSC 36379
N,N,N',N'-tetramethyl-4,4'-benzylidenedianiline

Inchi: InChI=1S/C23H26N2/c1-24(2)21-14-10-19(11-15-21)23(18-8-6-5-7-9-18)20-12-16-22(17-

InchiKey: WZKXBGJNNCGHIC-UHFFFAOYSA-N

Formula: C23H26N2

SMILES: CN(C)c1ccc(C(c2ccccc2)c2ccc(N(C)C)cc2)cc1

Mol. weight [g/mol]: 330.47

CAS: 129-73-7

Physical Properties

Property code	Value	Unit	Source
gf	679.87	kJ/mol	Joback Method
hf	298.38	kJ/mol	Joback Method
hfus	39.19	kJ/mol	Joback Method
hvap	78.64	kJ/mol	Joback Method
log10ws	-5.07		Crippen Method
logp	4.999		Crippen Method
mcvol	283.610	ml/mol	McGowan Method
pc	1653.80	kPa	Joback Method
tb	840.08	K	Joback Method
tc	1080.24	K	Joback Method
tf	503.21	K	Joback Method
vc	1.030	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	855.62	J/mol×K	840.08	Joback Method
cpg	873.99	J/mol×K	880.11	Joback Method
cpg	890.91	J/mol×K	920.13	Joback Method
cpg	906.51	J/mol×K	960.16	Joback Method
cpg	920.92	J/mol×K	1000.18	Joback Method
cpg	934.30	J/mol×K	1040.21	Joback Method
cpg	946.78	J/mol×K	1080.24	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C129737&Units=SI

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
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume