Methanone, bis[4-(diethylamino)phenyl]-

Other names:	Benzophenone, 4,4'-bis(diethylamino)-
	p,p'-(Tetraethyldiamino)benzophenone
	p,p'-bis(Diethylamino)benzophenone
	Michler's ethyl ketone
	4,4'-(Tetraethyldiamino)benzophenone
	4,4'-Bis(diethylamino)benzophenone
	4,4-Bis(diethylamino)benzophenone
	4,4'-Diethylaminobenzophenone
	4,4'-Bis(N,N-diethylamino)benzophenone
	Ethyl Michler ketone
	NSC 36365
	Narucure CS
	MEK (N,N,N',N', tetraethyl-4-4'-diamino benzophenone)
Inchi:	InChI=1S/C21H28N2O/c1-5-22(6-2)19-13-9-17(10-14-19)21(24)18-11-15-20(16-12-18)23
InchiKey:	VYHBFRJRBHMIQZ-UHFFFAOYSA-N
Formula:	C21H28N2O
SMILES:	CCN(CC)c1ccc(C(=O)c2ccc(N(CC)CC)cc2)cc1
Mol. weight [g/mol]:	324.46
CAS:	90-93-7

Physical Properties

Property code	Value	Unit	Source
gf	424.14	kJ/mol	Joback Method
hf	-4.17	kJ/mol	Joback Method
hfus	45.09	kJ/mol	Joback Method
hvap	79.05	kJ/mol	Joback Method
log10ws	-4.92		Crippen Method
logp	4.610		Crippen Method
mcvol	280.760	ml/mol	McGowan Method
pc	1546.35	kPa	Joback Method
rinpol	3152.00		NIST Webbook
rinpol	3152.00		NIST Webbook
tb	821.95	K	Joback Method
tc	1037.16	K	Joback Method
tf	519.18	K	Joback Method
vc	1.038	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	849.62	J/mol×K	821.95	Joback Method
cpg	866.95	J/mol×K	857.82	Joback Method
cpg	883.09	J/mol×K	893.69	Joback Method
cpg	898.11	J/mol×K	929.55	Joback Method
cpg	912.10	J/mol×K	965.42	Joback Method
cpg	925.14	J/mol×K	1001.29	Joback Method
cpg	937.32	J/mol×K	1037.16	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=C90937&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point

vc: Critical Volume