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

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C90937&Units=SI
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

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

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