4,4'-Dimethoxybenzophenone

Other names:	p,p'-Dimethoxybenzophenone
	Methanone, bis(4-methoxyphenyl)-
	Benzophenone, 4,4'-dimethoxy-
	Bis(p-methoxy)benzophenone
	Bis(4-anisyl) ketone
	Bis(4-methoxyphenyl)methanone
	Bis(p-anisyl) ketone
	Bis(p-methoxyphenyl) ketone
	Di(4-methoxyphenyl) ketone
	Di-p-anisyl ketone
	DMBP
	Bis(4-methoxyphenyl) ketone
Inchi:	InChI=1S/C15H14O3/c1-17-13-7-3-11(4-8-13)15(16)12-5-9-14(18-2)10-6-12/h3-10H,1-2H
InchiKey:	RFVHVYKVRGKLNK-UHFFFAOYSA-N
Formula:	C15H14O3
SMILES:	COc1ccc(C(=O)c2ccc(OC)cc2)cc1
Mol. weight [g/mol]:	242.27
CAS:	90-96-0

Physical Properties

Property code	Value	Unit	Source
gf	-57.94	kJ/mol	Joback Method
hf	-279.83	kJ/mol	Joback Method
hfus	25.89	kJ/mol	Joback Method
hvap	66.43	kJ/mol	Joback Method
log10ws	-3.67		Crippen Method
logp	2.935		Crippen Method
mcvol	188.000	ml/mol	McGowan Method
pc	2507.52	kPa	Joback Method
tb	704.63	K	Joback Method
tc	940.44	K	Joback Method
tf	431.08	K	Joback Method
vc	0.702	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	490.58	J/mol×K	704.63	Joback Method
cpg	554.26	J/mol×K	901.14	Joback Method
cpg	543.73	J/mol×K	861.83	Joback Method
cpg	532.11	J/mol×K	822.53	Joback Method
cpg	519.39	J/mol×K	783.23	Joback Method
cpg	505.56	J/mol×K	743.93	Joback Method
cpg	563.72	J/mol×K	940.44	Joback Method
dvisc	0.0001063	Pa×s	704.63	Joback Method
dvisc	0.0001316	Pa×s	659.04	Joback Method
dvisc	0.0001682	Pa×s	613.45	Joback Method
dvisc	0.0002237	Pa×s	567.86	Joback Method
dvisc	0.0003126	Pa×s	522.26	Joback Method
dvisc	0.0004658	Pa×s	476.67	Joback Method
dvisc	0.0007551	Pa×s	431.08	Joback Method

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=C90960&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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