Benzophenone, 3,3',4,4',5-pentamethoxy-

Inchi: InChI=1S/C18H20O6/c1-20-13-7-6-11(8-14(13)21-2)17(19)12-9-15(22-3)18(24-5)16(10-1
InchiKey: LEGVQFQAMCUMQW-UHFFFAOYSA-N
Formula: C18H20O6
SMILES: COc1ccc(C(=O)c2cc(OC)c(OC)c(OC)c2)cc1OC
Mol. weight [g/mol]: 332.35
CAS: 22699-97-4

Physical Properties

Property code	Value	Unit	Source
gf	-376.57	kJ/mol	Joback Method
hf	-772.82	kJ/mol	Joback Method
hfus	36.05	kJ/mol	Joback Method
hvap	82.32	kJ/mol	Joback Method
log10ws	-4.03		Crippen Method
logp	2.961		Crippen Method
mcvol	247.880	ml/mol	McGowan Method
pc	1763.93	kPa	Joback Method
tb	855.47	K	Joback Method
tc	1076.56	K	Joback Method
tf	569.14	K	Joback Method
vc	0.923	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	731.66	J/mol×K	855.47	Joback Method
cpg	745.39	J/mol×K	892.32	Joback Method
cpg	757.70	J/mol×K	929.17	Joback Method
cpg	768.55	J/mol×K	966.01	Joback Method
cpg	777.90	J/mol×K	1002.86	Joback Method
cpg	785.70	J/mol×K	1039.71	Joback Method
cpg	791.90	J/mol×K	1076.56	Joback Method
dvisc	0.0001664	Pa×s	569.14	Joback Method
dvisc	0.0001157	Pa×s	616.86	Joback Method

dvisc	0.0000848	Pa×s	664.58	Joback Method
dvisc	0.0000648	Pa×s	712.31	Joback Method
dvisc	0.0000512	Pa×s	760.03	Joback Method
dvisc	0.0000416	Pa×s	807.75	Joback Method
dvisc	0.0000346	Pa×s	855.47	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=C22699974&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