Benzophenone, 2,4-dimethoxy-

Inchi: InChI=1S/C15H14O3/c1-17-12-8-9-13(14(10-12)18-2)15(16)11-6-4-3-5-7-11/h3-10H,1-2H
InchiKey: WWVXYKPKRAMYDP-UHFFFAOYSA-N
Formula: C15H14O3
SMILES: COc1ccc(C(=O)c2ccccc2)c(OC)c1
Mol. weight [g/mol]: 242.27
CAS: 3555-84-8

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	505.56	J/mol×K	743.93	Joback Method
cpg	519.39	J/mol×K	783.23	Joback Method
cpg	532.11	J/mol×K	822.53	Joback Method
cpg	543.73	J/mol×K	861.83	Joback Method
cpg	554.26	J/mol×K	901.14	Joback Method
cpg	563.72	J/mol×K	940.44	Joback Method
dvisc	0.0007551	Pa×s	431.08	Joback Method
dvisc	0.0004658	Pa×s	476.67	Joback Method

dvisc	0.0003126	Pa×s	522.26	Joback Method
dvisc	0.0002237	Pa×s	567.86	Joback Method
dvisc	0.0001682	Pa×s	613.45	Joback Method
dvisc	0.0001316	Pa×s	659.04	Joback Method
dvisc	0.0001063	Pa×s	704.63	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=C3555848&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