2'-Hydroxy-4,4',5',6'-tetramethoxychalcone

Inchi: InChI=1S/C19H20O6/c1-22-13-8-5-12(6-9-13)7-10-14(20)17-15(21)11-16(23-2)18(24-3)1
InchiKey: FRISOFZUHCOQEC-JXMROGBWSA-N
Formula: C19H20O6
SMILES: COc1ccc(C=CC(=O)c2c(O)cc(OC)c(OC)c2OC)cc1
Mol. weight [g/mol]: 344.36
CAS: 41929-26-4

Physical Properties

Property code	Value	Unit	Source
gf	-327.92	kJ/mol	Joback Method
hf	-709.86	kJ/mol	Joback Method
hfus	43.83	kJ/mol	Joback Method
hvap	94.45	kJ/mol	Joback Method
log10ws	-4.21		Crippen Method
logp	3.323		Crippen Method
mcvol	257.670	ml/mol	McGowan Method
pc	1985.89	kPa	Joback Method
rinpol	2994.20		NIST Webbook
tb	935.73	K	Joback Method
tc	1169.80	K	Joback Method
tf	652.30	K	Joback Method
vc	0.907	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	784.57	J/mol×K	935.73	Joback Method
cpg	839.07	J/mol×K	1130.79	Joback Method
cpg	830.04	J/mol×K	1091.78	Joback Method
cpg	820.12	J/mol×K	1052.76	Joback Method
cpg	809.26	J/mol×K	1013.75	Joback Method
cpg	797.42	J/mol×K	974.74	Joback Method
cpg	847.25	J/mol×K	1169.80	Joback Method
dvisc	0.0000014	Pa×s	935.73	Joback Method

dvisc	0.0000018	Pa×s	888.49	Joback Method
dvisc	0.0000025	Pa×s	841.25	Joback Method
dvisc	0.0000036	Pa×s	794.02	Joback Method
dvisc	0.0000055	Pa×s	746.78	Joback Method
dvisc	0.0000088	Pa×s	699.54	Joback Method
dvisc	0.0000150	Pa×s	652.30	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=C41929264&Units=SI

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume