

(E)-1-(2-Hydroxy-4,6-dimethoxyphenyl)-3-(4-methoxyphenyl)propan-1-one

Inchi: InChI=1S/C18H18O5/c1-21-13-7-4-12(5-8-13)6-9-15(19)18-16(20)10-14(22-2)11-17(18)2
InchiKey: CGIBCVBDFUTMPT-RMKNXTFCSA-N
Formula: C18H18O5
SMILES: COc1ccc(C=CC(=O)c2c(O)cc(OC)cc2OC)cc1
Mol. weight [g/mol]: 314.33
CAS: 64680-84-8

Physical Properties

Property code	Value	Unit	Source
gf	-221.71	kJ/mol	Joback Method
hf	-545.53	kJ/mol	Joback Method
hfus	40.44	kJ/mol	Joback Method
hvap	89.15	kJ/mol	Joback Method
log10ws	-4.09		Crippen Method
logp	3.314		Crippen Method
mvol	237.710	ml/mol	McGowan Method
pc	2233.41	kPa	Joback Method
rinpol	2964.90		NIST Webbook
rinpol	2964.90		NIST Webbook
tb	885.45	K	Joback Method
tc	1122.36	K	Joback Method
tf	606.28	K	Joback Method
vc	0.834	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	702.18	J/molxK	885.45	Joback Method
cpg	715.41	J/molxK	924.94	Joback Method
cpg	727.75	J/molxK	964.42	Joback Method
cpg	739.25	J/molxK	1003.91	Joback Method
cpg	750.00	J/molxK	1043.39	Joback Method
cpg	760.05	J/molxK	1082.88	Joback Method
cpg	769.48	J/molxK	1122.36	Joback Method

dvisc	0.0000312	Paxs	606.28	Joback Method
dvisc	0.0000173	Paxs	652.81	Joback Method
dvisc	0.0000104	Paxs	699.34	Joback Method
dvisc	0.0000066	Paxs	745.87	Joback Method
dvisc	0.0000045	Paxs	792.39	Joback Method
dvisc	0.0000031	Paxs	838.92	Joback Method
dvisc	0.0000023	Paxs	885.45	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C64680848&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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