Gingerol

Other names:	3-Decanone, 5-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-, (S)- 3-Decanone, 5-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-, (S)-(+)- (+)-[6]-Gingerol (S)-(+)-[6]-Gingerol [6]-Gingerol 3-Decanone, 5-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-, (5S)- (S)-5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-3-decanone
Inchi:	InChI=1S/C17H26O4/c1-3-4-5-6-14(18)12-15(19)9-7-13-8-10-16(20)17(11-13)21-2/h8,10
InchiKey:	NLDDIKRKFXEWBK-UHFFFAOYSA-N
Formula:	C17H26O4
SMILES:	CCCCCC(O)CC(=O)CCc1ccc(O)c(OC)c1
Mol. weight [g/mol]:	294.39
CAS:	23513-14-6

Physical Properties

Property code	Value	Unit	Source
gf	-332.76	kJ/mol	Joback Method
hf	-748.77	kJ/mol	Joback Method
hfus	42.57	kJ/mol	Joback Method
hvap	94.83	kJ/mol	Joback Method
log10ws	-3.95		Crippen Method
logp	3.234		Crippen Method
mcvol	245.810	ml/mol	McGowan Method
pc	1994.77	kPa	Joback Method
ripol	4010.00		NIST Webbook
ripol	4010.00		NIST Webbook
tb	868.67	K	Joback Method
tc	1073.03	K	Joback Method
tf	549.99	K	Joback Method
vc	0.882	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	774.51	J/mol×K	868.67	Joback Method
cpg	788.25	J/mol×K	902.73	Joback Method
cpg	801.31	J/mol×K	936.79	Joback Method
cpg	813.75	J/mol×K	970.85	Joback Method
cpg	825.64	J/mol×K	1004.91	Joback Method
cpg	837.04	J/mol×K	1038.97	Joback Method
cpg	848.02	J/mol×K	1073.03	Joback Method
dvisc	0.0000576	Pa×s	549.99	Joback Method
dvisc	0.0000202	Pa×s	603.10	Joback Method
dvisc	0.0000084	Pa×s	656.22	Joback Method
dvisc	0.0000040	Pa×s	709.33	Joback Method
dvisc	0.0000021	Pa×s	762.44	Joback Method
dvisc	0.0000012	Pa×s	815.56	Joback Method
dvisc	0.0000007	Pa×s	868.67	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C23513146&Units=SI
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

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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature

tf:	Normal melting (fusion) point
vc:	Critical Volume