zingerol

Inchi: InChI=1S/C11H16O3/c1-8(12)3-4-9-5-6-10(13)11(7-9)14-2/h5-8,12-13H,3-4H2,1-2H3
InchiKey: GTLGHKNKLRZSMO-UHFFFAOYSA-N
Formula: C11H16O3
SMILES: COc1cc(CCC(C)O)ccc1O
Mol. weight [g/mol]: 196.24

Physical Properties

Property code	Value	Unit	Source
gf	-254.36	kJ/mol	Joback Method
hf	-512.35	kJ/mol	Joback Method
hfus	25.43	kJ/mol	Joback Method
hvap	74.73	kJ/mol	Joback Method
log10ws	-2.15		Crippen Method
logp	1.714		Crippen Method
mcvol	159.700	ml/mol	McGowan Method
pc	3356.75	kPa	Joback Method
ripol	2908.00		NIST Webbook
ripol	2908.00		NIST Webbook
ripol	2910.00		NIST Webbook
tb	677.52	K	Joback Method
tc	880.57	K	Joback Method
tf	432.44	K	Joback Method
vc	0.540	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	434.47	J/mol×K	677.52	Joback Method
cpg	446.17	J/mol×K	711.36	Joback Method
cpg	457.25	J/mol×K	745.20	Joback Method
cpg	467.74	J/mol×K	779.04	Joback Method
cpg	477.70	J/mol×K	812.88	Joback Method
cpg	487.18	J/mol×K	846.73	Joback Method
cpg	496.23	J/mol×K	880.57	Joback Method

dvisc	0.0005700	Pa×s	432.44	Joback Method
dvisc	0.0001820	Pa×s	473.29	Joback Method
dvisc	0.0000697	Pa×s	514.13	Joback Method
dvisc	0.0000307	Pa×s	554.98	Joback Method
dvisc	0.0000152	Pa×s	595.83	Joback Method
dvisc	0.0000082	Pa×s	636.67	Joback Method
dvisc	0.0000048	Pa×s	677.52	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R332833&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