2-Octanol, 8,8-dimethoxy-

Inchi: InChI=1S/C10H22O3/c1-9(11)7-5-4-6-8-10(12-2)13-3/h9-11H,4-8H2,1-3H3
InchiKey: SGFZPZDYTDDIOQ-UHFFFAOYSA-N
Formula: C10H22O3
SMILES: COC(CCCCCC(C)O)OC
Mol. weight [g/mol]: 190.28
CAS: 312305-55-8

Physical Properties

Property code	Value	Unit	Source
gf	-318.38	kJ/mol	Joback Method
hf	-676.96	kJ/mol	Joback Method
hfus	21.07	kJ/mol	Joback Method
hvap	58.58	kJ/mol	Joback Method
log10ws	-2.17		Crippen Method
logp	1.937		Crippen Method
mcvol	169.370	ml/mol	McGowan Method
pc	2258.96	kPa	Joback Method
tb	564.34	K	Joback Method
tc	728.46	K	Joback Method
tf	277.74	K	Joback Method
vc	0.638	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	434.11	J/mol×K	564.34	Joback Method
cpg	447.59	J/mol×K	591.69	Joback Method
cpg	460.60	J/mol×K	619.05	Joback Method
cpg	473.12	J/mol×K	646.40	Joback Method
cpg	485.16	J/mol×K	673.76	Joback Method
cpg	496.72	J/mol×K	701.11	Joback Method
cpg	507.80	J/mol×K	728.46	Joback Method
dvisc	0.0244859	Pa×s	277.74	Joback Method
dvisc	0.0043018	Pa×s	325.51	Joback Method

dvisc	0.0011795	Pa×s	373.27	Joback Method
dvisc	0.0004337	Pa×s	421.04	Joback Method
dvisc	0.0001956	Pa×s	468.81	Joback Method
dvisc	0.0001022	Pa×s	516.57	Joback Method
dvisc	0.0000596	Pa×s	564.34	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=C312305558&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