cis-2-Isopropyl-4-methyl-1,3-dioxolane

Inchi: InChI=1S/C7H14O2/c1-5(2)7-8-4-6(3)9-7/h5-7H,4H2,1-3H3/t6-,7+/m0/s1
InchiKey: NWXXKKDLGZLEGH-NKWVEPMBSA-N
Formula: C7H14O2
SMILES: CC1COC(C(C)C)O1
Mol. weight [g/mol]: 130.18
CAS: 17226-63-0

Physical Properties

Property code	Value	Unit	Source
gf	-137.78	kJ/mol	Joback Method
hf	-416.95	kJ/mol	Joback Method
hfus	21.33	kJ/mol	Joback Method
hvap	39.76	kJ/mol	Joback Method
log10ws	-1.30		Crippen Method
logp	1.404		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
pc	3254.14	kPa	Joback Method
tb	423.63	K	Joback Method
tc	622.94	K	Joback Method
tf	213.45	K	Joback Method
vc	0.404	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	235.22	J/mol×K	423.63	Joback Method
cpg	250.36	J/mol×K	456.85	Joback Method
cpg	264.82	J/mol×K	490.07	Joback Method
cpg	278.59	J/mol×K	523.28	Joback Method
cpg	291.70	J/mol×K	556.50	Joback Method
cpg	304.15	J/mol×K	589.72	Joback Method
cpg	315.97	J/mol×K	622.94	Joback Method
dvisc	0.0053129	Pa×s	213.45	Joback Method
dvisc	0.0025283	Pa×s	248.48	Joback Method

dvisc	0.0014455	Pa×s	283.51	Joback Method
dvisc	0.0009346	Pa×s	318.54	Joback Method
dvisc	0.0006588	Pa×s	353.57	Joback Method
dvisc	0.0004946	Pa×s	388.60	Joback Method
dvisc	0.0003894	Pa×s	423.63	Joback Method

Sources

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=C17226630&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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