1,3-Dioxolane, 2,2,4,5-tetramethyl-, cis-

Inchi: InChI=1S/C7H14O2/c1-5-6(2)9-7(3,4)8-5/h5-6H,1-4H3/t5-,6+
InchiKey: IWHKRVPYJLOGAW-OLQVQODUSA-N
Formula: C7H14O2
SMILES: CC1OC(C)(C)OC1C
Mol. weight [g/mol]: 130.18
CAS: 17226-65-2

Physical Properties

Property code	Value	Unit	Source
gf	-148.54	kJ/mol	Joback Method
hf	-416.77	kJ/mol	Joback Method
hfus	19.62	kJ/mol	Joback Method
hvap	38.68	kJ/mol	Joback Method
log10ws	-1.65		Crippen Method
logp	1.546		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
pc	3269.04	kPa	Joback Method
tb	419.64	K	Joback Method
tc	622.61	K	Joback Method
tf	248.11	K	Joback Method
vc	0.406	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	236.39	J/mol×K	419.64	Joback Method
cpg	251.90	J/mol×K	453.47	Joback Method
cpg	266.45	J/mol×K	487.30	Joback Method
cpg	280.12	J/mol×K	521.13	Joback Method
cpg	292.97	J/mol×K	554.96	Joback Method
cpg	305.10	J/mol×K	588.78	Joback Method
cpg	316.57	J/mol×K	622.61	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17226652&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
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