cis-5-Hydroxy-2-methyl-1,3-dioxane

Inchi: InChI=1S/C5H10O3/c1-4-7-2-5(6)3-8-4/h4-6H,2-3H2,1H3/t4-,5+
InchiKey: RLVMGTURHNLOJX-SYDPRGILSA-N
Formula: C5H10O3
SMILES: CC1OCC(O)CO1
Mol. weight [g/mol]: 118.13

Physical Properties

Property code	Value	Unit	Source
gf	-301.10	kJ/mol	Joback Method
hf	-528.78	kJ/mol	Joback Method
hfus	21.66	kJ/mol	Joback Method
hvap	52.54	kJ/mol	Joback Method
log10ws	0.03		Crippen Method
logp	-0.260		Crippen Method
mcvol	88.060	ml/mol	McGowan Method
pc	4743.15	kPa	Joback Method
ripol	1494.00		NIST Webbook
ripol	1494.00		NIST Webbook
tb	474.76	K	Joback Method
tc	670.84	K	Joback Method
tf	263.21	K	Joback Method
vc	0.308	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	204.68	J/mol×K	474.76	Joback Method
cpg	256.23	J/mol×K	638.16	Joback Method
cpg	246.94	J/mol×K	605.48	Joback Method
cpg	237.14	J/mol×K	572.80	Joback Method
cpg	226.84	J/mol×K	540.12	Joback Method
cpg	216.02	J/mol×K	507.44	Joback Method
cpg	265.02	J/mol×K	670.84	Joback Method
dvisc	0.0002631	Pa×s	474.76	Joback Method

dvisc	0.0004246	Pa×s	439.50	Joback Method
dvisc	0.0007446	Pa×s	404.24	Joback Method
dvisc	0.0014541	Pa×s	368.99	Joback Method
dvisc	0.0032707	Pa×s	333.73	Joback Method
dvisc	0.0089098	Pa×s	298.47	Joback Method
dvisc	0.0317470	Pa×s	263.21	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=R572180&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume