2,3,4,6-Tetramethyl-1-acetylglucoside (B)

Inchi: InChI=1S/C12H22O7/c1-7(13)18-12-11(17-5)10(16-4)9(15-3)8(19-12)6-14-2/h8-12H,6H2
InchiKey: XMEWOWGGNTUINQ-CTWIGJCISA-N
Formula: C12H22O7
SMILES: COCC1OC(OC(C)=O)C(OC)C(OC)C1OC
Mol. weight [g/mol]: 278.30

Physical Properties

Property code	Value	Unit	Source
gf	-696.27	kJ/mol	Joback Method
hf	-1223.73	kJ/mol	Joback Method
hfus	38.47	kJ/mol	Joback Method
hvap	64.80	kJ/mol	Joback Method
log10ws	-0.09		Crippen Method
logp	-0.034		Crippen Method
mcvol	205.870	ml/mol	McGowan Method
pc	1845.16	kPa	Joback Method
rinpol	1437.00		NIST Webbook
rinpol	1450.00		NIST Webbook
rinpol	1454.00		NIST Webbook
tb	667.75	K	Joback Method
tc	859.74	K	Joback Method
tf	403.07	K	Joback Method
vc	0.753	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	611.02	J/mol×K	667.75	Joback Method
cpg	693.88	J/mol×K	827.74	Joback Method
cpg	679.38	J/mol×K	795.74	Joback Method
cpg	663.78	J/mol×K	763.75	Joback Method
cpg	647.16	J/mol×K	731.75	Joback Method
cpg	629.55	J/mol×K	699.75	Joback Method
cpg	707.26	J/mol×K	859.74	Joback Method

dvisc	0.0001415	Pa×s	667.75	Joback Method
dvisc	0.0001686	Pa×s	623.64	Joback Method
dvisc	0.0002065	Pa×s	579.52	Joback Method
dvisc	0.0002613	Pa×s	535.41	Joback Method
dvisc	0.0003451	Pa×s	491.30	Joback Method
dvisc	0.0004813	Pa×s	447.18	Joback Method
dvisc	0.0007221	Pa×s	403.07	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=R117456&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume