L(-)-Fucose, tetramethyl ether

Other names: Methyl 6-deoxy-2,3,4-tri-O-methylhexopyranoside
Inchi: InChI=1S/C10H20O5/c1-6-7(11-2)8(12-3)9(13-4)10(14-5)15-6/h6-10H,1-5H3
InchiKey: FHJGOJSYFDDBAA-UHFFFAOYSA-N
Formula: C10H20O5
SMILES: COC1OC(C)C(OC)C(OC)C1OC
Mol. weight [g/mol]: 220.26

Physical Properties

Property code	Value	Unit	Source
gf	-479.19	kJ/mol	Joback Method
hf	-937.65	kJ/mol	Joback Method
hfus	30.51	kJ/mol	Joback Method
hvap	51.20	kJ/mol	Joback Method
log10ws	-0.39		Crippen Method
logp	0.423		Crippen Method
mcvol	170.250	ml/mol	McGowan Method
pc	2100.34	kPa	Joback Method
rinpol	1313.70		NIST Webbook
tb	545.70	K	Joback Method
tc	735.71	K	Joback Method
tf	308.37	K	Joback Method
vc	0.618	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	448.04	J/mol×K	545.70	Joback Method
cpg	466.75	J/mol×K	577.37	Joback Method
cpg	484.84	J/mol×K	609.04	Joback Method
cpg	502.27	J/mol×K	640.71	Joback Method
cpg	519.00	J/mol×K	672.37	Joback Method
cpg	534.98	J/mol×K	704.04	Joback Method
cpg	550.17	J/mol×K	735.71	Joback Method
dvisc	0.0008464	Pa×s	308.37	Joback Method

dvisc	0.0005641	Pa×s	347.93	Joback Method
dvisc	0.0004084	Pa×s	387.48	Joback Method
dvisc	0.0003139	Pa×s	427.04	Joback Method
dvisc	0.0002523	Pa×s	466.59	Joback Method
dvisc	0.0002098	Pa×s	506.15	Joback Method
dvisc	0.0001792	Pa×s	545.70	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U332750&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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