Fucitol permethylated

Other names: L-Fucitol permethyl
Inchi: InChI=1S/C11H24O5/c1-8(13-3)10(15-5)11(16-6)9(14-4)7-12-2/h8-11H,7H2,1-6H3
InchiKey: BYHPANAHLMUKFI-UHFFFAOYSA-N
Formula: C11H24O5
SMILES: COCC(OC)C(OC)C(OC)C(C)OC
Mol. weight [g/mol]: 236.31

Physical Properties

Property code	Value	Unit	Source
gf	-493.02	kJ/mol	Joback Method
hf	-952.59	kJ/mol	Joback Method
hfus	16.09	kJ/mol	Joback Method
hvap	50.58	kJ/mol	Joback Method
log10ws	-0.31		Crippen Method
logp	0.713		Crippen Method
mcvol	195.200	ml/mol	McGowan Method
pc	1846.75	kPa	Joback Method
rinpol	1360.00		NIST Webbook
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tb	561.42	K	Joback Method
tc	734.67	K	Joback Method
tf	264.88	K	Joback Method
vc	0.718	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	500.52	J/mol×K	561.42	Joback Method
cpg	516.79	J/mol×K	590.29	Joback Method
cpg	532.55	J/mol×K	619.17	Joback Method
cpg	547.77	J/mol×K	648.04	Joback Method
cpg	562.44	J/mol×K	676.92	Joback Method
cpg	576.51	J/mol×K	705.79	Joback Method
cpg	589.99	J/mol×K	734.67	Joback Method

dvisc	0.0041952	Pa×s	264.88	Joback Method
dvisc	0.0012003	Pa×s	314.30	Joback Method
dvisc	0.0004825	Pa×s	363.73	Joback Method
dvisc	0.0002412	Pa×s	413.15	Joback Method
dvisc	0.0001399	Pa×s	462.57	Joback Method
dvisc	0.0000901	Pa×s	512.00	Joback Method
dvisc	0.0000627	Pa×s	561.42	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=R10315&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume