L-Fucitol pentaacetate

Inchi: InChI=1S/C16H24O10/c1-8(23-10(3)18)15(25-12(5)20)16(26-13(6)21)14(24-11(4)19)7-2
InchiKey: CZLGYDMUTMQWDY-RSWASSRISA-N
Formula: C16H24O10
SMILES: CC(=O)OCC(OC(C)=O)C(OC(C)=O)C(OC(C)=O)C(C)OC(C)=O
Mol. weight [g/mol]: 376.36

Physical Properties

Property code	Value	Unit	Source
gf	-1095.52	kJ/mol	Joback Method
hf	-1618.69	kJ/mol	Joback Method
hfus	37.04	kJ/mol	Joback Method
hvap	95.44	kJ/mol	Joback Method
log10ws	-1.28		Crippen Method
logp	0.296		Crippen Method
mcvol	273.500	ml/mol	McGowan Method
pc	1610.29	kPa	Joback Method
rinpol	1825.00		NIST Webbook
rinpol	1825.00		NIST Webbook
tb	945.17	K	Joback Method
tc	1159.36	K	Joback Method
tf	570.88	K	Joback Method
vc	1.028	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	869.28	J/mol×K	945.17	Joback Method
cpg	879.64	J/mol×K	980.87	Joback Method
cpg	888.39	J/mol×K	1016.57	Joback Method
cpg	895.51	J/mol×K	1052.26	Joback Method
cpg	900.94	J/mol×K	1087.96	Joback Method
cpg	904.66	J/mol×K	1123.66	Joback Method
cpg	906.62	J/mol×K	1159.36	Joback Method
dvisc	0.0003213	Pa×s	570.88	Joback Method

dvisc	0.0001665	Pa×s	633.26	Joback Method
dvisc	0.0000971	Pa×s	695.64	Joback Method
dvisc	0.0000619	Pa×s	758.03	Joback Method
dvisc	0.0000422	Pa×s	820.41	Joback Method
dvisc	0.0000304	Pa×s	882.79	Joback Method
dvisc	0.0000229	Pa×s	945.17	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=R71466&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