Glucose, 2,3,6-triethyl, acetylated

Inchi: InChI=1S/C16H28O8/c1-6-19-9-12-13(22-10(4)17)14(20-7-2)15(21-8-3)16(24-12)23-11(5
InchiKey: RKQQDKAUQIJGQH-QMHWVQJVSA-N
Formula: C16H28O8
SMILES: CCOCC1OC(OC(C)=O)C(OCC)C(OCC)C1OC(C)=O
Mol. weight [g/mol]: 348.39

Physical Properties

Property code	Value	Unit	Source
gf	-791.51	kJ/mol	Joback Method
hf	-1418.87	kJ/mol	Joback Method
hfus	50.43	kJ/mol	Joback Method
hvap	80.45	kJ/mol	Joback Method
log10ws	-1.54		Crippen Method
logp	1.053		Crippen Method
mcvol	263.800	ml/mol	McGowan Method
pc	1425.07	kPa	Joback Method
rinpol	2064.00		NIST Webbook
rinpol	2064.00		NIST Webbook
tb	813.14	K	Joback Method
tc	1009.29	K	Joback Method
tf	498.08	K	Joback Method
vc	0.984	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	866.57	J/mol×K	813.14	Joback Method
cpg	884.08	J/mol×K	845.83	Joback Method
cpg	900.15	J/mol×K	878.52	Joback Method
cpg	914.75	J/mol×K	911.22	Joback Method
cpg	927.82	J/mol×K	943.91	Joback Method
cpg	939.32	J/mol×K	976.60	Joback Method
cpg	949.19	J/mol×K	1009.29	Joback Method
dvisc	0.0005588	Pa×s	498.08	Joback Method

dvisc	0.0003611	Pa×s	550.59	Joback Method
dvisc	0.0002518	Pa×s	603.10	Joback Method
dvisc	0.0001860	Pa×s	655.61	Joback Method
dvisc	0.0001437	Pa×s	708.12	Joback Method
dvisc	0.0001151	Pa×s	760.63	Joback Method
dvisc	0.0000948	Pa×s	813.14	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R530062&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

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