

Glucose, 2,3-diethyl, acetylated

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C16H26O9/c1-6-20-14-13(23-10(4)18)12(8-22-9(3)17)25-16(24-11(5)19)15(14)

UXNZSAHFGXXBML-QMHWVQJVSA-N

C16H26O9

CCOC1C(OC(C)=O)OC(COC(C)=O)C(OC(C)=O)C1OCC

362.37

Physical Properties

Property code	Value	Unit	Source
gf	-920.43	kJ/mol	Joback Method
hf	-1531.45	kJ/mol	Joback Method
hfus	52.03	kJ/mol	Joback Method
hvap	87.20	kJ/mol	Joback Method
log10ws	-1.32		Crippen Method
logp	0.579		Crippen Method
mcvol	265.370	ml/mol	McGowan Method
pc	1495.35	kPa	Joback Method
rinpol	2144.00		NIST Webbook
tb	867.01	K	Joback Method
tc	1071.28	K	Joback Method
tf	548.01	K	Joback Method
vc	0.990	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	885.91	J/molxK	867.01	Joback Method
cpg	944.66	J/molxK	1037.23	Joback Method
cpg	936.44	J/molxK	1003.19	Joback Method
cpg	926.39	J/molxK	969.14	Joback Method
cpg	914.59	J/molxK	935.10	Joback Method
cpg	901.07	J/molxK	901.05	Joback Method
cpg	951.01	J/molxK	1071.28	Joback Method
dvisc	0.0000946	Paxs	867.01	Joback Method
dvisc	0.0001145	Paxs	813.84	Joback Method

dvisc	0.0001422	Paxs	760.68	Joback Method
dvisc	0.0001825	Paxs	707.51	Joback Method
dvisc	0.0002440	Paxs	654.34	Joback Method
dvisc	0.0003433	Paxs	601.18	Joback Method
dvisc	0.0005161	Paxs	548.01	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R530106&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

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