D-(+)-Ribono-1,4-lactone, triacetate

Inchi: InChI=1S/C11H14O8/c1-5(12)16-4-8-9(17-6(2)13)10(11(15)19-8)18-7(3)14/h8-10H,4H2,
InchiKey: JIILXWRHIYAEQM-UHFFFAOYSA-N
Formula: C11H14O8
SMILES: CC(=O)OCC1OC(=O)C(OC(C)=O)C1OC(C)=O
Mol. weight [g/mol]: 274.22

Physical Properties

Property code	Value	Unit	Source
gf	-847.60	kJ/mol	Joback Method
hf	-1254.67	kJ/mol	Joback Method
hfus	36.17	kJ/mol	Joback Method
hvap	75.94	kJ/mol	Joback Method
log10ws	-0.11		Crippen Method
logp	-0.662		Crippen Method
mcvol	184.750	ml/mol	McGowan Method
pc	2510.03	kPa	Joback Method
rinpol	1731.50		NIST Webbook
tb	780.66	K	Joback Method
tc	996.19	K	Joback Method
tf	527.42	K	Joback Method
vc	0.691	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	563.43	J/mol×K	780.66	Joback Method
cpg	576.69	J/mol×K	816.58	Joback Method
cpg	588.76	J/mol×K	852.50	Joback Method
cpg	599.59	J/mol×K	888.42	Joback Method
cpg	609.12	J/mol×K	924.35	Joback Method
cpg	617.28	J/mol×K	960.27	Joback Method
cpg	624.02	J/mol×K	996.19	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U380072&Units=SI

Legend

cpg:	Ideal gas heat capacity
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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