erythritol, acetylated

Inchi: InChI=1S/C12H18O8/c1-7(13)17-5-11(19-9(3)15)12(20-10(4)16)6-18-8(2)14/h11-12H,5-6
InchiKey: RSZROFFHBBZJAD-TXEJJXNPSA-N
Formula: C12H18O8
SMILES: CC(=O)OCC(OC(C)=O)C(COC(C)=O)OC(C)=O
Mol. weight [g/mol]: 290.27

Physical Properties

Property code	Value	Unit	Source
gf	-890.40	kJ/mol	Joback Method
hf	-1280.77	kJ/mol	Joback Method
hfus	30.94	kJ/mol	Joback Method
hvap	78.15	kJ/mol	Joback Method
log10ws	-0.52		Crippen Method
logp	-0.024		Crippen Method
mcvol	209.700	ml/mol	McGowan Method
pc	2123.64	kPa	Joback Method
rinpol	1565.80		NIST Webbook
rinpol	1565.80		NIST Webbook
tb	778.24	K	Joback Method
tc	974.96	K	Joback Method
tf	483.64	K	Joback Method
vc	0.791	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	606.12	J/mol×K	778.24	Joback Method
cpg	657.35	J/mol×K	942.17	Joback Method
cpg	649.02	J/mol×K	909.39	Joback Method
cpg	639.70	J/mol×K	876.60	Joback Method
cpg	629.43	J/mol×K	843.81	Joback Method
cpg	618.23	J/mol×K	811.03	Joback Method
cpg	664.67	J/mol×K	974.96	Joback Method
dvisc	0.0000723	Pa×s	778.24	Joback Method

dvisc	0.0000937	Pa×s	729.14	Joback Method
dvisc	0.0001259	Pa×s	680.04	Joback Method
dvisc	0.0001773	Pa×s	630.94	Joback Method
dvisc	0.0002645	Pa×s	581.84	Joback Method
dvisc	0.0004246	Pa×s	532.74	Joback Method
dvisc	0.0007505	Pa×s	483.64	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=R488901&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