2-[2-[2-(2-Hydroxyethoxy)ethoxy]ethoxy]ethyl acetate

Other names: Tetraethylene glycol, monoacetate
Inchi: InChI=1S/C10H20O6/c1-10(12)16-9-8-15-7-6-14-5-4-13-3-2-11/h11H,2-9H2,1H3
InchiKey: OZVKHOPICATTIK-UHFFFAOYSA-N
Formula: C10H20O6
SMILES: CC(=O)OCCOCCOCCOCCO
Mol. weight [g/mol]: 236.26

Physical Properties

Property code	Value	Unit	Source
gf	-652.42	kJ/mol	Joback Method
hf	-1043.42	kJ/mol	Joback Method
hfus	32.09	kJ/mol	Joback Method
hvap	70.92	kJ/mol	Joback Method
log10ws	0.60		Crippen Method
logp	-0.408		Crippen Method
mcvol	182.680	ml/mol	McGowan Method
pc	2287.14	kPa	Joback Method
rinpol	1674.30		NIST Webbook
rinpol	1674.30		NIST Webbook
tb	663.93	K	Joback Method
tc	832.21	K	Joback Method
tf	402.13	K	Joback Method
vc	0.693	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	506.73	J/mol×K	663.93	Joback Method
cpg	518.94	J/mol×K	691.98	Joback Method
cpg	530.65	J/mol×K	720.02	Joback Method
cpg	541.84	J/mol×K	748.07	Joback Method
cpg	552.51	J/mol×K	776.12	Joback Method
cpg	562.63	J/mol×K	804.16	Joback Method
cpg	572.19	J/mol×K	832.21	Joback Method

dvisc	0.0011332	Pa×s	402.13	Joback Method
dvisc	0.0004598	Pa×s	445.76	Joback Method
dvisc	0.0002191	Pa×s	489.40	Joback Method
dvisc	0.0001179	Pa×s	533.03	Joback Method
dvisc	0.0000696	Pa×s	576.66	Joback Method
dvisc	0.0000443	Pa×s	620.30	Joback Method
dvisc	0.0000299	Pa×s	663.93	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U351925&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