Tetraethylene glycol, pentyl ether, acetate

Other names: 2-(2-(2-Pentoxy-ethoxy)-ethoxy)-ethoxy)-ethyl acetate
Inchi: InChI=1S/C15H30O6/c1-3-4-5-6-17-7-8-18-9-10-19-11-12-20-13-14-21-15(2)16/h3-14H2
InchiKey: DFTAUBRZUHAJGX-UHFFFAOYSA-N
Formula: C15H30O6
SMILES: CCCCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 306.40

Physical Properties

Property code	Value	Unit	Source
gf	-578.50	kJ/mol	Joback Method
hf	-1126.61	kJ/mol	Joback Method
hfus	42.14	kJ/mol	Joback Method
hvap	67.78	kJ/mol	Joback Method
log10ws	-1.31		Crippen Method
logp	1.806		Crippen Method
mcvol	253.130	ml/mol	McGowan Method
pc	1392.29	kPa	Joback Method
rinpol	2073.00		NIST Webbook
tb	708.57	K	Joback Method
tc	879.47	K	Joback Method
tf	419.89	K	Joback Method
vc	0.972	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	741.92	J/mol×K	708.57	Joback Method
cpg	817.74	J/mol×K	850.99	Joback Method
cpg	804.18	J/mol×K	822.51	Joback Method
cpg	789.80	J/mol×K	794.02	Joback Method
cpg	774.62	J/mol×K	765.54	Joback Method
cpg	758.66	J/mol×K	737.05	Joback Method
cpg	830.46	J/mol×K	879.47	Joback Method
dvisc	0.0000481	Pa×s	708.57	Joback Method

dvisc	0.0000627	Pa×s	660.46	Joback Method
dvisc	0.0000852	Pa×s	612.34	Joback Method
dvisc	0.0001220	Pa×s	564.23	Joback Method
dvisc	0.0001868	Pa×s	516.12	Joback Method
dvisc	0.0003123	Pa×s	468.00	Joback Method
dvisc	0.0005874	Pa×s	419.89	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R188626&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