Tetraethylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C13H24O6/c1-3-4-15-5-6-16-7-8-17-9-10-18-11-12-19-13(2)14/h3H,1,4-12H2,
InchiKey: VDTCQMRHLAJIRL-UHFFFAOYSA-N
Formula: C13H24O6
SMILES: C=CCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 276.33

Physical Properties

Property code	Value	Unit	Source
gf	-507.50	kJ/mol	Joback Method
hf	-959.90	kJ/mol	Joback Method
hfus	35.68	kJ/mol	Joback Method
hvap	62.66	kJ/mol	Joback Method
log10ws	-0.33		Crippen Method
logp	0.802		Crippen Method
mcvol	220.650	ml/mol	McGowan Method
pc	1671.43	kPa	Joback Method
rinpol	1803.00		NIST Webbook
rinpol	1799.00		NIST Webbook
rinpol	1804.00		NIST Webbook
rinpol	1805.00		NIST Webbook
rinpol	1803.00		NIST Webbook
rinpol	1805.00		NIST Webbook
rinpol	1800.00		NIST Webbook
rinpol	1802.00		NIST Webbook
rinpol	1804.00		NIST Webbook
rinpol	1802.00		NIST Webbook
rinpol	1806.00		NIST Webbook
rinpol	1800.00		NIST Webbook
rinpol	1800.00		NIST Webbook
rinpol	1799.00		NIST Webbook
rinpol	1800.00		NIST Webbook
tb	659.49	K	Joback Method
tc	830.94	K	Joback Method
tf	395.59	K	Joback Method
vc	0.841	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	607.17	J/mol×K	659.49	Joback Method
cpg	622.31	J/mol×K	688.06	Joback Method
cpg	636.82	J/mol×K	716.64	Joback Method
cpg	650.68	J/mol×K	745.21	Joback Method
cpg	663.88	J/mol×K	773.79	Joback Method
cpg	676.40	J/mol×K	802.36	Joback Method
cpg	688.23	J/mol×K	830.94	Joback Method
dvisc	0.0006950	Pa×s	395.59	Joback Method
dvisc	0.0003859	Pa×s	439.57	Joback Method
dvisc	0.0002385	Pa×s	483.56	Joback Method
dvisc	0.0001597	Pa×s	527.54	Joback Method
dvisc	0.0001137	Pa×s	571.52	Joback Method
dvisc	0.0000850	Pa×s	615.51	Joback Method
dvisc	0.0000661	Pa×s	659.49	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152271&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