Tetraethylene glycol, diacetate

Other names:	2-[2-[2-(2-Acetyloxyethoxy)ethoxy]ethoxy]ethyl acetate
	13-Oxo-3,6,9,12-tetraoxatetradec-1-yl acetate
	Ethanol, 2,2'-[oxybis(2,1-ethanediyloxy)]bis-, diacetate
	2,2'-[oxybis(ethane-2,1-diyloxy)]bisethyl diacetate
Inchi:	InChI=1S/C12H22O7/c1-11(13)18-9-7-16-5-3-15-4-6-17-8-10-19-12(2)14/h3-10H2,1-2H3
InchiKey:	DXYGJDUJLDXFOD-UHFFFAOYSA-N
Formula:	C12H22O7
SMILES:	CC(=O)OCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]:	278.30
CAS:	22790-12-1

Physical Properties

Property code	Value	Unit	Source
gf	-732.68	kJ/mol	Joback Method
hf	-1177.27	kJ/mol	Joback Method
hfus	35.97	kJ/mol	Joback Method
hvap	67.85	kJ/mol	Joback Method
log10ws	0.17		Crippen Method
logp	0.162		Crippen Method
mcvol	212.430	ml/mol	McGowan Method
pc	1843.58	kPa	Joback Method
rinpol	1833.00		NIST Webbook
rinpol	1832.00		NIST Webbook
rinpol	1829.00		NIST Webbook
rinpol	1834.00		NIST Webbook
rinpol	1825.20		NIST Webbook
rinpol	1825.20		NIST Webbook
rinpol	1833.00		NIST Webbook
rinpol	1836.00		NIST Webbook
rinpol	1829.00		NIST Webbook
rinpol	1831.00		NIST Webbook
rinpol	1834.00		NIST Webbook
rinpol	1830.00		NIST Webbook
rinpol	1836.00		NIST Webbook
rinpol	1831.00		NIST Webbook
rinpol	1836.00		NIST Webbook
rinpol	1828.00		NIST Webbook

rinpol	1832.00		NIST Webbook
tb	693.80	K	Joback Method
tc	871.25	K	Joback Method
tf	436.01	K	Joback Method
vc	0.809	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	598.49	J/mol×K	693.80	Joback Method
cpg	662.22	J/mol×K	841.67	Joback Method
cpg	650.92	J/mol×K	812.10	Joback Method
cpg	638.87	J/mol×K	782.52	Joback Method
cpg	626.10	J/mol×K	752.95	Joback Method
cpg	612.63	J/mol×K	723.37	Joback Method
cpg	672.75	J/mol×K	871.25	Joback Method
dvisc	0.0000700	Pa×s	693.80	Joback Method
dvisc	0.0000891	Pa×s	650.84	Joback Method
dvisc	0.0001174	Pa×s	607.87	Joback Method
dvisc	0.0001614	Pa×s	564.90	Joback Method
dvisc	0.0002339	Pa×s	521.94	Joback Method
dvisc	0.0003621	Pa×s	478.97	Joback Method
dvisc	0.0006110	Pa×s	436.01	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C22790121&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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